

# Analysing the Role of Risk Management in a Textile Production Company in Ghana

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## **Analysing the Role of Risk Management in a Textile Production Company in Ghana**

Nartey Philip Adjirackor  
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I dedicate my final dissertation to Jehovah, Mr. Benjamin Nartey Adjirackor of the Controller & Accountants General's Department, my dear mum and the rest of the family who made my dream a reality. Your unstinting support and advice will never go unnoticed. To the staff of Printex and Akosombo Textile Limited and the Textiles, Garment, and Leather Workers Union (Ghana), I appreciate your support. To my supervisor Juhani Kettunen, thanks for the patience and guidance.

I am much grateful to all members of Vantaa English congregation of Jehovah's Witnesses, who shaped my spiritual life.

“And I heard the number of those who were sealed, a hundred and forty four thousand, sealed out of every tribe of the sons of Israel;... a great crowd, which no man was able to number, out of all nations, and tribes and peoples and tongues, standing before the throne and before the lamb....” (Revelations 7:4, 9) To anybody who understands this scripture, I pray Jehovah's blessings on you.

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I praise Jehovah for the life and protection, “for you are my crag and my stronghold; and for the sake of your name you will lead me and conduct me” - Psalms 31:3.

Nartey, Philip Adjirackor

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The textile industry in Ghana has been in decline. Local companies have shut down operations due to varying factors. The number of companies has dropped from forty in the 80's to four as of the time of this research, which was conducted at Printex Ghana Limited and Akosombo Textile Limited. The purpose of the research is to identify various risks affecting the case companies and to try to understand the role risk management plays in solving those identified risks. It will determine whether the companies under consideration have a risk management department and if possible how much budget is allocated to the department. The medium for risk communication will also be determined. How risk management has changed over the past years will also be vital in making further recommendations to management.

A combination of quantitative and qualitative research methods was used. Questionnaires on risk management were distributed to both management and employees. It was found out that the companies conduct a form of risk management but in an unstructured manner. A separate risk management department does not exist in either company. A budget is either not available or too low for a comprehensive risk management to be established or effective. The respondents' knowledge of risk management was also low. Qualified risk personnel were not employed. The attitude and mode of identifying risks has not changed much over the past years. Risk management has not played any major role in the companies.

Key words     risk management, role, textile industry, printex textiles, akosombo textiles

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## 1. Introduction

The introduction provides a general overview of the research. Here the main aim of the research and the preliminary findings of the study are presented.

### 1.1 Background

Risk management has played a vital role in the administration and management of a firm's product and line of business over decades. Many unforeseen occurrences occur in the daily running of a business both internally and externally. Globalization and the evolution of technology have contributed to competition in every business environment. This makes the management, running and vitally the comprehensive life cycle of a firm's product very difficult to control. Pragmatic and proactive steps must be taken to reduce or prevent the possible risks that those factors will pose to companies. In doing this, firms need to be proactive in identifying the various factors that negatively affect the firm and the product. Full benefits of positive influences must also be explored. The concept of risk management is therefore an important theory in modern business.

Production capacity in the Ghanaian textile industry has declined over the years. It was the mainstay of the economy in the 1970's to 80's but suffered a decline in operation with the number of large and medium sized textile production companies dropping from sixteen (16) in the mid 1970's to four (4) as of 2005 (Stiftung 2006, 137). This is due to the shutting down of production lines of most of the companies. Majority of workers lost their jobs. Ghana Textile Print (GTP) which produced a very good textile brand and competed with multinational textile companies in the past. The company shut down its spinning and weaving departments laying off many of its workers. This development is not different for other companies in the industry. Juapong Textile went into administration with its production lines also completely shut down. It reopened briefly under the name Volta Star Textiles but could not cope with competition. Most companies still operating are believed to be importing raw materials. One such company is Printex, believed to be producing below capacity. Akosombo Textile Limited (ATL) the only surviving local textile company also has similar problems (The Africa Report, 2012).

This research is carried out to analyse the prospect or the role of risk management in the Ghanaian textile production industry. Much emphasis is on Printex Ghana Limited and Akosombo Textile Limited. It was decided to focus on the production industries as the textile industry itself is too broad to be analysed. Country risks will be discussed, and possible remedies suggested. The main aim of the research cannot be arrived at without first identifying sources of risk and nature of exposure. Risks will be analysed in respect of the country under discussion, Ghana (only case companies). The future of Enterprise Risk Management in the industry will also be taken into consideration with the use of the modern risk management as it has distinctive characteristics which makes it possible to identify risks, measure, appreciate its consequences, and take action such as transferring or mitigating the risks risk (Crouhy, Gakai & Mark 2006, 1).

True that, risk management has taken headway in developed countries, but there is little or no emphasis on its prospects in developing countries. This results in low patronisation or usage by businesses in those countries. Ghana is not an exception. It becomes very risky to operate in such environments due to the fact that developing countries are highly vulnerable to sudden changes in interest rates, exchange rates and commodity prices (Claessens 1993, 5). It is more uncertain and risky as business operations and regulations do not follow the same pattern.

## 1.2 Objective of the Study

Internal and external factors contributed to a decline in business activities in the Ghanaian textile industry. Hence this research will identify all the possible contributing factors of this decline. Efforts will be made to analyze the role risk management will play in an effort to manage all the risks that are likely to adversely affect business operations of the companies under discussion.

This research will concentrate mostly on the role played by risk management department (if any) of the textile production companies under discussion in identifying those risks. It will also look at the significance, time and resources that the company places on the role risk management. Its contribution to profit maximization cannot be overlooked. Changes in the way risk management has been performed in the industry over the past years will be identified. Effects (positive and negative) it had on the overall operation and progress of the company will also be considered.

Present risks prone to companies in this industry will be identified. Suggestions and recommendations necessary for the company to be proactive and take pragmatic and comprehensive steps to avoid the identified risks or reduce their effects on business operations will be made.

One of the most important aspects of this research is to find out who takes core decisions relating to risk management in the organization. Total percentage of the budget allocated to risk management will also be necessary to determine whether the company places much emphasis on the role of the risk management department (if any).

## 1.2 Research Questions

A lot of analysis and possible reasons have been attributed to the menace in the Ghanaian textile production industry, but no tangible and progressive steps have been strategized to control the negative effects of the factors that lead to the problem. On careful consideration, a comprehensive risk management procedure or system must be established to help solve the problem. Resorting to risk management will help avoid the occurrence of future



negative factors that will hinder the continuous progress of the textile production industry.

In order to arrive at a more functional solution to the problems a lot of questions must be asked and tangible and or realistic answers made to help in the research. Primly among them is the question of how risk management will help in the goal of avoiding the recurring negative factors hindering the progress of Printex Ghana Limited and Akosombo Textile Limited. The fundamental question can also be why risk management has been chosen ahead of the numerous problem-solving solutions suggested so far. Aside from the main question of identifying the role of risk management in those companies, answers to questions such as how the risk management has changed over the years, who takes care of risk management issues and how much time and financial resource is attributed to risk management needs to be attained.

Additionally, individual positive effects that risk management (if any) on the company's business operations needs to be analyzed and conclusions made. A thorough and conclusive analysis of the whole Ghanaian textile production industry from the perspectives of the companies under consideration will also be analyzed to identify typical risks available. It must be noted here that, the research will only be based on the analysis of the companies concerned in the large textile industry. In other words, the research is conducted in no other place than the production part of the textile industry and only in the companies involved.

This research has become important due to the great gaps in the current business situation and the forecasted future events or plans; hence the greater need for a comprehensive Enterprise Risk Management infrastructure to help the advancement of risk management capabilities over time.

#### 1.4 Scope and Limitations of Study

The research is impeded by the differing and complicated terminology, methodology and measures across organizations and departments. It becomes more difficult in the environment in which the research is being carried as the significance and knowledge of the mode of operation of risk management is virtually low in the Ghanaian economy. This is due to the fact that establishing a sound and comprehensive risk management program in today's business environment requires not only a thorough understanding of the fundamental risk management principles but also the legal, regulatory, financial, and operational requirements of the organization. These requirements are complicated to determine in the market under consideration. Getting the organization or the company in question to give you accurate data is also a prime problem as management think this information will be made available to competitors. There is also inadequate information or previous study available

on the case companies on risk management that will serve as a basis for further analysis or as an aid in the research. It becomes difficult when managers are not willing to take part in interviews or try to hold back vital information.

The various country risks available cannot also be overlooked as they provide the basis under which future decisions on operations, strategies and policies will be formulated. But those risks are too many and not enough tools are available to identify them or better still they cannot be proven scientifically. Also, due to the political situation, identified country risks are denied to exist by politicians which makes it difficult to find solutions to them.

### 1.5 Structure of the Research

In a chronological order, the study first introduces the subject by giving the background information, the research gap and objective, the research questions or problem, scope and limitations of the study. Secondly, the literature review or the theoretical framework ensues with information on the subject as gathered from secondary sources.

Primly the theoretical framework explains the theory of risk management and all the issues concerns with the subject under consideration. The factors affecting the adoption risk management in the market under consideration is analyzed and reviewed from the perspectives of other researchers. The empirical study discusses the research methods used in the collection of the data for the study. Finally, suggestions for future research and conclusions are made on the study.

## 2.Literature review

### 2.1 Defining Risk Management

By definition, risk is a condition where there exists a probability of deviation from desired or expected outcomes (Gallati 2003, 8). Risk can be the combination of probability of an event and its effects (Airmic; Alarm & Irm 2002, 3). In all undertakings, there is a tendency for events and consequences to result in opportunities for benefits (upside) or threats to success (downside). The outcome of an event can either enhance the operations of a company or affect its progress negatively. Risk management is not a one-day activity for organizations, companies or corporations but a continuous activity. It can be either short or long term. The benefits of which should be analyzed, not only in the context of an activity concerned but broadened to the varied stakeholders who can be affected directly or indirectly. Risks entails both uncertainty and exposure, that is, possible consequences (Holton 2004, 20). Hence, it can be argued that risk consists of two vital elements - exposures and uncertainty. Risk, then, is exposure to a proposition of which the party concerned is uncertain (Holton 2004,4) of the outcome. As there is always the probability of an event, which may be uncertain, there is the need to design or put in place mechanisms to prevent the negative outcome or reduce its negative effects on the party involved. Uncertainty can also be an imperfect knowledge whilst risk is uncertain consequences, primarily exposure to unfavorable consequences (Hardaker,Huime & Anderson 1997, 55). Uncertainty is necessary for a risk to happen, but its presence need not guarantee a risky situation.

According to Gallati, businesses evaluate and take risks relating to their business expertise and, to varying degrees, with significant influence over potential returns. Accidents, crises and unforeseen circumstances have happened and will continue to happen in this ever changing business world (Gallati 2003, 33). Different quantitative models and methodologies have emerged in the past decades. These have played a vital role in the management of organisations. Characteristically, risk management procedures must be simple, designed to change according to the operations of business at any particular point in time. This will more than help in guarding, solving and or reducing the risks that the various day-to-day decisions taken by both high level management individuals and or employees. Risks can never be taken out of business operations. Every policy, decision, designed models and method adopted is a risk in its nature.Follow up risk management procedures must be designed to run concurrently with those decisions and methods. This avoids failures or the ineffective of those procedures.

### 2.2 Risk, Event,Probability and Hazard

In an attempt to establish risk management in an organisation, a clear distinction must be made between risk, event and probability and a critical look on how they are related and their roles in risk management establishment. As already defined, risk is the degree to which an outcome differs from expectations (Carpenter 2009, 130). When expectations and projections of a company are more accurate, the fewer risks they will encounter. This makes management better prepared and competent, resulting in fewer negative effects. An event is something that can occur. More precisely it is a definable occurrence (Broder 2006, 24). This means that when an event happens it can be described with words or in any other form possible but technically in two main ways, that is, in terms of the damage or negative effect it will present if it occurs, or, it may be considered in terms of the probability of its occurrence. The analysis of the possibility of occurrence is known as probability. How high a risk is likely to occur depends largely on the environment the business operates and how management deals with forecasted risks.

Hazard refers to the source of risk in risk management. Primly, the likelihood of harm from exposure distinguishes risk from hazard (Cohrssen & Covello 1989, 6). There is always a hazard before risk. Thus, risk is created or brought about by hazard. Therefore, in an attempt to handle risks well, a thorough analysis must be made to identify the various likely hazards that might give rise to risks in the operational environment.

### 2.3. The Typology of Risk

To have a good insight on the risks affecting a company, all probable or substantial risks must be kept in mind at all times. This makes it possible for easily identification of risks. Helps those risks to be classified and eliminated, minimised or transferred whilst accepting the ones that cannot be dealt with. A typical good risk manager follows a typology in an attempt to identify, evaluate, map and finally act on the results of risks (Fragniere & Sullivan 2007, 16). In this typology, the first step is to identify all the strategic risks and divide them into financial and non-financial or operation risks. A risk becomes strategic if its effect on the realisation of objectives. From Table 1, it can be deduced that the financial risks are further divided into liquidity, market and credit risks whilst the operations risks are subdivided into legal, political, technology, natural perils and operations. It must be noted that when these categorised risks are handled in the best possible way, the final outcomes and decisions will have a direct or indirect effect on the company's reputation and compliance risks.

Also risks are normally classified on the basis of their character and much on the activities of the business they affect. The classification and categorisation of risks by the risk management department helps to identify hazards and manage risks. Risks identified can belong to more than one category. The lack of government transparency and the adoption of

ineffective regulatory systems hinder the development of the economy hence businesses. An unstable political environment creates an uncertain environment for investment and economic growth (US International Trade Commission 2005, 5-29)

Risk Category	Subcategories	Specific risks
Financial Risk	Credit	loan portfolio(internal)
		interest rate(internal or external)
		loan enforcement practices(internal)
		loan rescheduling and refinancing practices(internal)
	Market	prices(internal)
		markets(external)
		exchange rates(currency)(external)
		value chain(external)
	Liquidity(internal)	Cashflow management issues(internal)
	Transaction (internal)	
Operational risks	Fraud and Integrity(internal)	Branch-level authority limits on lending
	Technology(internal)	information and technology
	Human Resources(internal)	Staff training
		Operational manual
	Legal and Compliance(internal)	Operational audits,financial audits
	Environmental(external)	Specific environmental impacts
	Performance(internal)	Generating profits and returns on assets and equity to attract investors
Strategic risks		
	External business(external)	New financial sector laws
	Reputational(external)	Competitive pressure(existing, new actors)
	Governance(internal)	Changes in regulatory practices(licensing and reporting requirements)(external)
		Lack of board consistency and direction(internal)
	Country(external)	Relationships with donors and government programs (external)
Producer risks	Experience	
	Technology	
	Management Ability	

Table 1: Risk Types

In theory the more all-encompassing the categorization is, the more comprehensive and detailed the decomposition, the better the company's risk will easily be identified and handled.

### 2.3.1 Interest and Equity Price Risk

This situation that fixed-income security will either rise or fall in market interest rate is regarded as the simplest of form of interest rate risk. In complex situations, the rise and fall can also be attributed to differences in maturities, nominal values, and reset dates of instruments and cash flows that are either in assets or liability forms (Crouhy and et al 2006, 27).

A risk associated with fluctuations in the stock market. Modern business decisions are adversely or highly affected by trading on the stock market no matter the line of business.

### 2.3.2 Market and Business Risk

The Bank for International Settlement defined market risk as the risk of losses in on-and off-balance-sheet positions due to fluctuations in market prices of interest rates, equity, commodity and foreign exchange rates. Market risk can then be assumed as the totality of all risk factors on a product (Gallati 2003, 33). Market risks have various negative effects like loss in operation margins primly due to rising raw materials, price adjustments and possible alteration of sales volume. Business risks as the research is more concerned about relates to the probability of management decisions and environmental conditions having negative or positive influences on a company. The effects can arise from product placement issues, client behaviour, marketing approaches, strategic and policy decisions and so on (Gallati 2003, 36). In the case of the textile companies under discussion, the likelihood of the effects are high and thus pragmatic steps must be taken to reduce or prevent the risk from happening. Risks in themselves are inevitable and they are vital elements to the success of a company. The procedures and steps followed by management to reduce risks have a direct effect on the progress and profit maximization. Risk management also serve as a vital tool for strategic functions, hence in understanding where and how risks arise in business, management can propel higher-quality returns to the bottom line (PricewaterhouseCoopers 2006, 3)

### 2.3.3 Political Risk

This type of risk has a significant effect on the total regulation of a business. The spending power of customers and or consumers is also affected in one way or the other. Issues such as government's policies and view on marketing ethics, culture and religion affects the

total effect on the overall activities of the business in question. Some scholars argue that the main affecting factor to business progress is created by government (Blackwell publishing 2003, 77). Resource distribution affects the political institutions which results can influence the future allocation of goods and services (World Bank 2006, 9).

#### 2.3.4. Socio-cultural Risks

Issues about religion and language also affect the patronage of goods or services in a particular geographical location. Potential consumer's lifespan and lifestyle are also considered here. Time for leisure and attitudes towards foreign products and services is worth taking into consideration. Hence it deals with the demographic and cultural aspects of the external macro-environment. Social factors or risks affect the needs of customers and the actual size of targeted market (JG Ventures Argentina)

#### 2.3.5 Technological Risks

Technology has been at the forefront of business growth over the years. Every business entity needs to consider the progressive development of technology and its probable effects on its objectives. How distribution is changed by the introduction of a new technology and if that particular innovation helps management to communicate easily with consumers must be considered.

#### 2.3.6 Economic Risks

A country's long term Gross Domestic Product per capita, inflation and interest rate levels directly affect the direction of the business. Government policies on these issues go a long way to affect the budget projections of a business. The acquisition of loans and other financial aspects is directly affected by interest and bank rates mostly determined by economic situations.

### 2.4. The Evolution of Risk Management

Over the past years, risk management has undergone worldwide changes as much emphasis has been placed on its advantages due to the positive effects it has on every management decisions, policies and strategies. Companies have come to understand that each decision they take have effects on the overall performance of the business. Hence, this concludes the assertion that every decision is a risk and efforts must be made to reduce its negative effects on business operations or attain the full benefits of it if it is a positive effect. Due to this, there is the need for identifying, assessing, managing and monitoring the organization's business opportunities and risks. Over the decades, risk management has become an important aspect of every business entity in the Ghanaian economy. This is

due to the occurrence of recent events, regulators and the media who have contributed to the awareness and importance of risk management practices and techniques. It was formerly employed by businesses in the insurance and banking sector and other financial institutions but the recent importance attached to risk management has made it possible for small businesses in new emerging markets to adopt the practice easily. Modernisation, geopolitical instability and the growing complexity of doing business have also played a major role. Risk and control functions have received greater attention and become more embedded in the organisation, but some may argue that risk management was practised by businesses in various ways before the development of new approaches. Previous practices were unstructured and also did not follow any specific laid down processes. However, continuity and structured procedures and practices is an important part of modern day risk management.

Regulators in the Ghanaian market have developed an active role characterised by the several initiatives in areas of operational risks, market and credit making financial organisations and other businesses invest in risk management processes, infrastructure and knowledge bases (Gallati 2003, 30) all with the objective to establish and enforce an integrated risk management framework for the benefit of both management and regulators. In addition to this shared objective, regulators seek to protect customers and clients' assets without much regard to cost, financial markets and market stability.

The idea that business activities entail risks is already known. The establishment of formalised systems of risk management in organisations is rather a more recent development. Risk management is commonly viewed as "the process by which organisations methodically address the risks attached to their activities in pursuit of organisational objectives and across the portfolio of all their activities"( Collier,Berry & Burke 2007, 60 - 90).

Enterprise Risk Management provides a model for systematic identification of particular events or circumstances applicable to the achievement of an organisation's prime objectives. The approach to risk management undertakes a more holistic perspective. This begins with identification of risks. The assessment of their likelihood and the magnitude of their individual and joint impact on the company's objectives and the development of a strategy to monitor, manage and mitigate the identified risks are other steps worth taking (Subramaniam & Carey 2011, 1).

The recent volatility in the marketplace leads to improvement in regulatory guidance on business operations and laws. The new Financial Accounting Standards Board (FASB) statements has increased and placed much focus on improving risk management practices (Poorman 2008, 3).



## 2.5 Managing Risk

In typical business environment, the only constant is change. In other words, change is predominant in any business operating environment hence the need for successful businesses and in that sense manufacturing companies have to be proactive enough to be able to manage risk successfully or be prepared for such unexpected events or adapt to them in the best possible way (Goldberg&Palladini 2010, 3). It is true that risk management though in different forms has been part of business planning and operation for large businesses and financial institutions for some time; it is a fairly new discipline among manufacturing and small scale businesses. Businesses in the developing countries are not an exception. There is much focus on the subject of risk management for manufacturing, small scale businesses in the developing countries due to the recent crises and experiences that represent a emerging or new understanding of the importance of being proactive or anticipating unexpected events, rather than merely reacting to them.

Additionally, business managers have to learn the importance of risk management to able to cope with an array of political, financial, environment and other weather-related crises. Whatever the area the business operates the effects are the same: liquidity problems, loss of assets, higher costs and so on. Nevertheless, it must be noted that companies with a comprehensive and well established risk management plans are almost always likely to survive, maintain their clients, remain in business or stable and increase their profit margins(Goldberg&Palladini 2010, 3). Efforts must therefore be made by business entities to categorize risks, risk confronting businesses, ways to develop a comprehensive risk management system and maintain them as well (Goldberg & Palladini 2010, 4-7)

## 2.6 Business Process and Risk Management

There is a direct relationship between every business process and the possible risks that can affect its progress. There is therefore the need to integrate risk management into business practices. A successful risk management cannot be a normal business programme. It must be integrated into the business process to help it provide timely, relevant and validated risk information to management for decision making. This also helps risk management to become a day-to-day process. The ability of an organization to identify, access and manage risk is a clear indication of an organizations ability to respond and adapt to change. Integrating risk management in a business process puts management in a better position to be more proactive and risk risk conscious. Appropriate response to potential risks can then be established. This reduces uncertainties and losses associated with global business disruptions. The more real-time and proactive the analysis of potential risks is,

the more controllable the achievement of objectives becomes and vice versa (PricewaterHouseCoopers 2008,12-16)

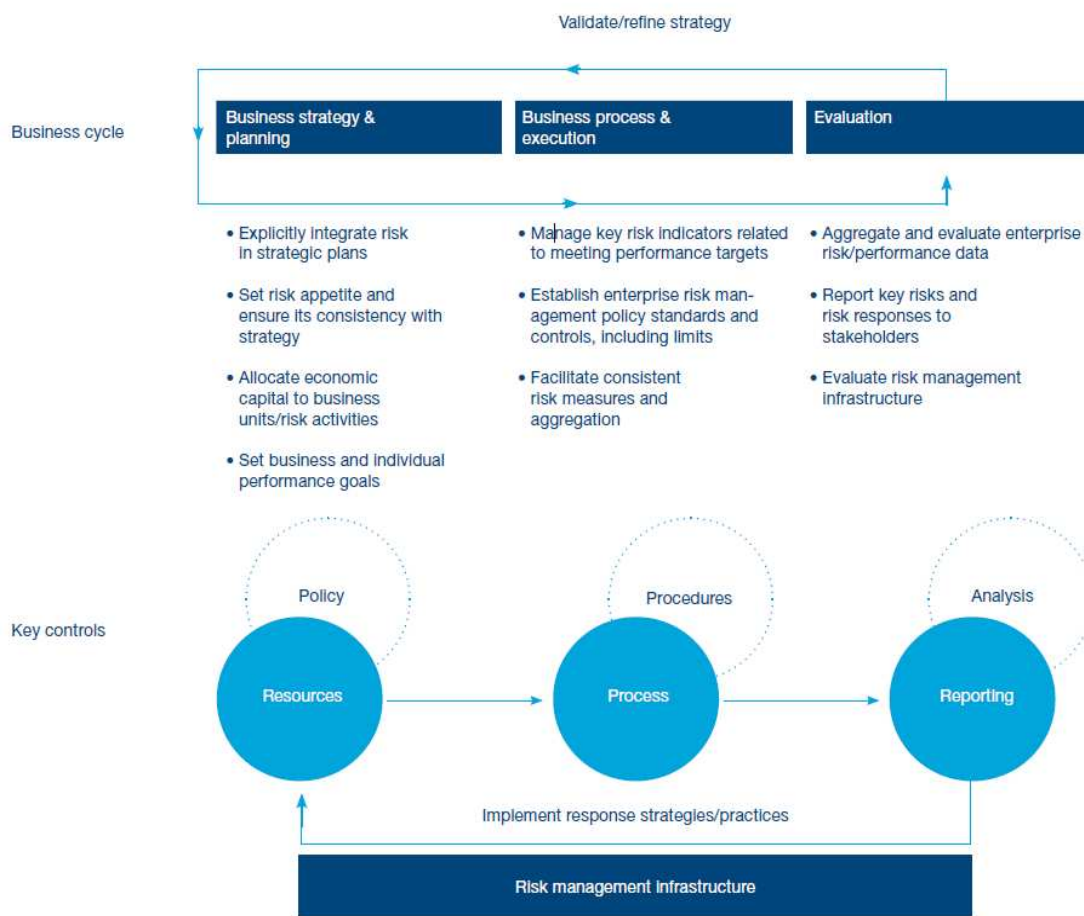


Figure 1: Risk management infrastructure

The diagram above typifies the process or model followed in integrating risk management in a business process. When Enterprise risk management is embedded in an organisation, it makes it easier for management to make periodic reviews of objectives and its related relevant events that can have an impact on set priorities, as well as (re)assessment of risks and development of new risk approaches if required.

## 2.7 Risk Management Process

In an attempt to draft a comprehensive risk management for a company, an organised risk management process is required to identify, monitor and control existing or likely risks that might affect the whole business operation (Thanet District Council 2010, 4-6). This is vital as it will help the company to prevent the ever-occurring profit minimisation as it will provide a better platform and conducive atmosphere for employees to concentrate on contributing their quota to the development of the growth of the company. Risks management revolves around identifying hazards, assessing the magnitude of risk and deter-

mining the best course of action (ISACA 2009, 11-16). Risk management is also a selection and implementation of security countermeasures to achieve an acceptable level of risk at an acceptable cost (Roper, 17). It must be noted that risk management is a highly iterative process of continuous improvement and adjustment that is best embedded into existing practices or business operations to enhance implementation. According to McClinden et al, due to some situation risk management is normally taken at the tactical or operational level of a business setup (AusAID 2010, 2-10).

It also defines what appropriate steps with their respective activities that is necessary to implement risk management with the support if a consistent method and effective risk management delivery in mind. (AusAID 2010, 4)

The following overlapping steps can be said to constitute an effective risk management process:

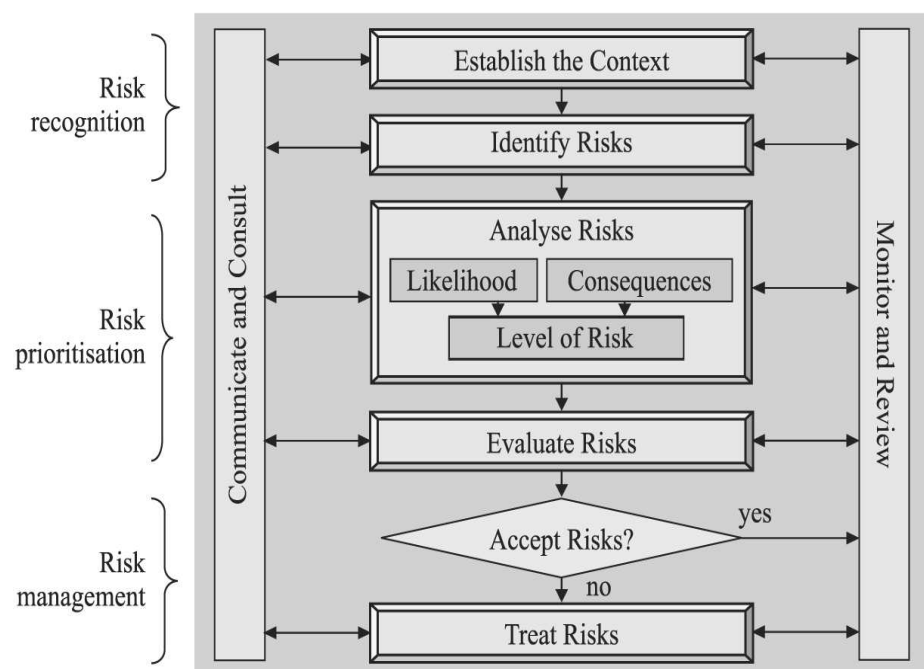


Figure 2: Risk Management Process

1. Establish the Context
2. Identify Risks
3. Analyse Risks
4. Assess and Prioritise Risks
5. Treat Risks

## 2.8 Establish the Context

This fundamental step of the whole risk management process is regarded the most vital as it provides the bases on which other decisions can be made. Without this the whole risk management or the desired objective cannot be reached fully. With reference to the definition of risk being it any occurrence that may have a direct or indirect effect on the businesses objectives. Consequently, a constant review of the whole objective of the company can provide a clear understanding of how it operates. With the objective clearly defined and understood, the environmental factors (internal and external) that chiefly affect the risk management must be analysed.

Decisions and issues under operating procedures, strategic plans, demographics of the organisation, responsibilities and accountabilities among other things which fall under the internal environment must be given a critical look. Not forgetting the external aspects like socioeconomic issues, government laws and policies and interagency agreements. Ideally, an environmental scan which has proven a useful technique in establishing a comprehensive risk management (McLinden, Fanta, Widdouron & Doyle 2011, 102). In this technique, the non-exhaustive aspects of both the internal and external environment such as geographic, legislative, policy, operational, political, economic, technology, commercial and organisational are analysed. This proves to be vital to the overall risk management process as relevant issues discussed under those headings helps the organisation to obtain an objective overall perspective of the factors that are likely to adversely affect operational objectives and goals. Moreover, in an attempt to establish a good and comprehensive risk management in an organisation, every aspect of the organisation must be taken in consideration and an objective view attributed to all issues under discussion as risk can come from anywhere of the organisation.

## 2.9 Identification of Risks

As risk management is mainly about identifying opportunities as it is about avoiding or reducing undesirable effects of risks. Identifying the said risks in a practical sense as possible is the bedrock of drafting a comprehensive risk management for any business enterprise. It is good to understand the operation of the business to be able to fully identify all possible threats which might start from any part of the business environment. Some risks can easily be managed by management taking pragmatic and proactive steps whilst others are not easily managed or controlled but it is highly imperative that the risk management department of the business identifies every possible risk to prevent the organisation from being affected unaware.

Ideally, risk identification is about asking these two basic questions: what can happen and how and why it could happen. The former question identifies the question and the latter provides valuable data about the likely causes (McLinden, Fanta, Widdowson & Doyle 2011, 102). According to Doyle et al, further questions such as what are the key drivers,

what can happen, the likely impact, existing controls and treatments, casual factors, operational influences, how the risk occur, whether the risk will occur in the short, medium and long term in addition to other vital questions are also asked to have a complete and broad view on the threats that the company is likely to face. His helps management to draw up counter actions to curb the risk or reduce the negative impact on business operations proactively. It is advised that all such risks must be considered as part of an effective management process.

#### 2.9.1 Checklist and Survey

This method of risk identification is regarded as the most common and used. Surveys and checklist are used to chronologically find or identify hazards, exposures, perils and etcetera as much as possible. It is widely used due to the fact that it is easier to use and very standardised. People or management with minimal knowledge of risk management can use or operate it. Disadvantageously, this method does not cover all areas of the business, hence limited in nature.

#### 2.9.2 Experts

It involves the use of highly qualified risk management personnel in the identification of risk areas and possible suggestion of treatment. This makes it easier and possible to assess all the risks without omitting some as qualified risk conscious individuals are involved in the assessment. It is actually the best way of risk identification for big and ever growing companies but it might be too expensive for small and medium sized companies.

#### 2.9.3 Flowchart

This is a graphical representation of company's operations to identify risks and hazards. Product analysis, site analysis, decision analysis, critical path analysis and departmental analysis are just a few of the different types of flowcharts used. This method makes it easy to identify bottlenecks and operations drifting out of already established plans. Moreover, it cannot cover entire avenues of operations, hardly indicates frequency or risks and have a limited applicability to liability exposures and vitally they are too process-oriented making it difficult for non-risk management personnel to read and make meanings out of it.

#### 2.9.4 Insurance Policy Review

Experts can be hired or internal management with core knowledge of risk management can operate this. It is similar to physical inspection and exposures and hazards can be read out just by studying or reviewing a contract or insurance policy. Very effective if combined with another risk identification method. The main disadvantage about this method is that it can only identify hazards or perils associated with the exposures covered by the insurance under study.

### 2.9.5 Procedures and Policies Review

This method is used to identify and determine how the organisation is functioning. It is usually done by internal management personnel from different sectors or departments of the organisation. There is a high degree or probability to identify exposures or hazards but there is a tendency that organisational politics will hamper or affect the objectiveness of identified hazards communication.

### 2.9.6 Financial Statement Analysis

This method helps to identify risks in the financial sector of the business. It helps to identify risks or financial losses that result from specific events and this can help to develop crisis contingency plans. The main demerit about this method is that it does not address business risks nor contemplate the contingent risk of losses associated to customers, employees or key suppliers.

### 2.9.7 Physical Inspection

It is one of the most useful methods for identifying potential risk area. This mode of risk identification makes it possible for the risk manager to have a face-to-face conversation with other employees making it possible to have clear and precise and first hand information on the potential exposure or hazard. Appointed risk surveyors can be appointed to carry out this exercise and report back to risk manager and management for decision making process to commence. This method can be expensive in respect to time and money. A clear analysis is not always made as the risk manager only inspects the activities at a department on specific days hence other activities that take place on other days is not considered making it impossible to properly assess risks. The risk manager will not be able to properly inspect other areas which are included in the organisation such as suppliers of raw materials who affect the operations of the organisation (Risk Management Guide 2010, 10-11)

### 2.9.8 Brainstorming

This involves the use of groups to identify a lot of risks by listing as many risks that come to mind as possible. This gives the participants the chance to build on the idea of each other to identify more risks and possibly far more risks than they could identify as individuals. The idea carried out in brainstorming mainly is to write down any risk that comes to mind no matter how insignificant you think it is. Abnormal ideas are also welcomed as it can provide a new and innovative way of identifying risks that may not have been previously considered. This method works best when it is unstructured or unrestrained. Moreover, participants may ignore other sources of risks such as commercial and external risks but concentrate more on areas that they are most comfortable such as technical risks

(Hillson 2007, 1). To get the best results, it is advisable to select the best participants who are familiar with the topics discussed and a leader who leads the groups have relevant documentation and knows the risk process well enough. Brainstorming is regarded as a lateral thinking process. It breaks out of thinking patterns into new ways of looking at things and is a very recommended way of establishing many creative solutions to a problem (Australian Government -AusAID 2007, 68)

### 3. Risks Analysis

Risks are analysed after been identified with the main purpose of establishing the significance of individual risks. This makes it easier for management to make informed decisions concerning strategies and the resources needed to manage the risk. To do this the likelihood of the risk and the consequences it will generate are compared. This comparison and combination helps the business to prioritize those risks identified. Quantitative, semi quantitative and qualitative methods can be used to analyse risks which almost always needs reliable data or information and technical input from a specialist (statistics) who provides an accurate determination of probability (McLinden, Fanta, Widdowson & Doyle 2011, 103).

The most widely used approach in modern business environment is the qualitative approach which makes use of a managers intuition, experience and concise and near perfect judgements to make decisions. A degree of uncertainty should be taken into account as with qualitative risk analysis methods a measure of subjectivity is required. Scaling and illustrations can be used to make the analyses clearer. By illustration, the basic definitions or elements of likelihood and consequences are used. This is usually in a matrix and helps the level of the risk to be easily identified and distinguished from its factors.

Likelihood is best understood by answering what is the probability that the event might happen. This can be answered as:

- a. High likelihood means the event is expected
- b. medium likelihood means the event could be expected
- c. low likelihood means the event may occur, but only frequently.

The consequence part of the analysis process is best understood by answering the question: if it happens, then what negative effects will be the outcome. Also the answers will have the following meanings;

- a. High consequence means significant adverse effects
- b. Medium consequence means moderate adverse effects

c. Low consequence means a minimum of adverse effects.

When the levels for the likelihood and consequence have been completely analysed, the result can then be illustrated on the matrix for better understanding and easy reference for management decision making.

A risk matrix is can be defined as a simple graphical tool which provides a basis for the combination of the chances of the occurrence or likelihood of an event and the consequences if the event occurred (Barringer 2006, 2). When the levels of the likelihood and consequence of each risk is determined, the result is then represented on a matrix. This is then made more visible by plotting the intersections for easy reading. It is common to use a three by three matrix but if a more precise measurement is needed more levels can be added, thus, a five level matrix could have examined likelihood as almost certain, likely, moderate, unlikely, and rare with the consequences reading catastrophic, major, moderate, minor, and insignificant.

Consequence		Likelihood	
	High	Medium	Low
High	High risk	Medium risk	Medium risk
Medium	Medium risk	Medium risk	Low risk
Low	Medium risk	Low risk	Low risk

Table 2: Risk Matrix

### 3.1 Assess and Prioritise Risks

This one involves the act of determining whether a risk previously identified risk is accepted or not. It also determines whether among those categorised as acceptable which of them are important for the business to manage (McLinden, Fanta, Widdowson & Doyle 2011, 104). This is an important step in the risk management process as not all business risks that confronts a particular department of the company can be controlled or managed successfully. This reduces cost and helps the risk management department to be more effective in adopting the right kind of tools to handle risk related issues. Allocation of valuable resources to the issues that is almost likely to have a greater negative effect or consequences on the whole business operation procedure is made possible. This is mostly done by the company detailing out which risks it is willing and able (considering the effects on operations and cost) to accept and channel the limited available resources to treat. Risk may be classified as acceptable for various reasons but chiefly among them is the fact that with some risks the costs of treating them might too high that it will be advisable to just accept them. Also the threat posed by the risk may be too low that with



the available resources its treatment is not necessary. On the cost context, the opportunity cost of accepting the risk may be higher than the threats (McLinden, Fanta, Widdowson & Doyle 2011, 104). Also it might due to the fact that controlling the risk is far beyond the stretch of the available resources in the company.

Furthermore, using the risk matrix risks that have been ranked as high and moderate are usually (not always) regarded as unacceptable and low ranked risks as acceptable. It must be noted that the definition or categorisation of acceptable or unacceptable risk depends on the objective of the business and the available resources. With the ever changing business environment and the unlimited resources available highly prioritised unacceptable risks are detailed out and comprehensive risk management procedures or treatment plan followed to prevent them or prevent their effects on business operations. Notwithstanding appropriate risk treatment tools or actions should be readily available for the acceptable risks or monitored and periodically reviewed or updated to ensure that the assumptions under which they were classified are valid. This is due to the fact that risk previously classified as acceptable might become unacceptable due to the changing or uncertain business environment and other uncontrolled or risk determining factors. This particular step in the risk management is important because it analyses identified risks and prioritize them for action. The outcome then becomes a prioritised list of risks for action. Risk prioritisation mostly involves a matrix of probability of the potential damage if the risk occurs, thereby classifying risk as high, low or medium through a traffic light system (Page & Spira 2004, 33-4). Acceptably, a common procedure or established risk management framework and language are the hallmark of Enterprise Risk Management (Selim and McNamee 1999, 159-74).

### 3.2 Treat Risks

The discussion of risk management implementation largely depends on the evaluation and selection of the tools and techniques to be adopted and the manpower to use them. Several factors which must be interrelated and have an impact on another should be considered in determining the risk control measures. (Australian Government- AusAID 2008, 19-30)

It must be noted that there is no single or widely acclaimed solution to manage risk as the determination of risk and its treatment is the sole decision of individual company. The whole process established after going through all the other process should be properly managed, continuously evaluated and updated periodically.

### 3.3 Risk Control Measures

This means categorizing the risk identified into how they can be addressed. It must be noted that the assigned methods used are categorized into three main risk control categories whilst the specific steps that are taken to control the risks are termed as risk control measures and the means by which potential risks are addressed are known as risk control options. All these, that is, the options, categories and individual methods selected are all intended and directed towards the limitation of the risk potential.

### 3.4 Risk Control Options and avoidance

This is adopted when total risk reduction or avoid it is required. It has been identified as the safest solution but the least realistic approach among all the risk control options available. Risk control managers usually say it is not an option at all.

### 3.5 Risk Reduction

When management take pragmatic steps in planning, testing, training, maintenance of standards, enforcement of codes and a well established risk communication systems, risk can almost always be minimized. It must be noted that the primary aim of standard operating procedures, planning, and training is to reduce the risk on business operations and the set profit margin projections of a particular product.

### 3.6 Risk Transfer

This is done by business risks to other parties such as insurance companies by purchasing insurance covers or better still contracting other risk oriented organizations to take up that aspect of company's business operations. It is also prudent that the business entity also tries to minimize expenses attributed to insurance and other risk transfer related costs. This aspect of risk control is very effective as in other to reduce losses on the part of the insurance companies or to avoid the probability of risk occurrence and possible claims by the insuree. The insurance company provides immense assistance in identifying and reducing risks in addition to paying claims and assuming portions of the risk when they occur (United States Fire Administration 1996, 46-48).

### 3.7 Communications in Risk Management

Risk communication plays an integral role in the dispensation of effectively established risk management process. It is true that employees and employers are uncomfortable talking about risk but the objective of risk management process instituted cannot achieve its main purpose if the details are not well communicated to the employees. Thus, an effective communication system is required for the smooth running of risk management and the

execution of actions recommended from risk analysis. External stakeholders also need the actual level of risk and its management processes by a company for various decisions in business negotiations. The lack of information on risk management sends a signal that the company is trying to cover up some known risks from stakeholders or an unbalanced or inadequate communication on known risks especially on high but managed risks may result in incorrect perception on the actual risk by third parties such as clients, investors or regulators (ISACA 2009, 18).

Effective communication up, down or across the incident chain of command within an organization is essential to thoroughly make maximum use of all available information to facilitate the risk management process and thus prevent loss or reduce the impact of identified risk on both employees and the business set-up in general (USfire Administration, 139). To do this the communication and chain of command between decision makers and the employees must be flexible to enhance the easy flow of information in the organization.

Moreover, for a risk communication to be effective it needs to demonstrate all the qualities of communication regardless of its type or the manner in which it is dispensed. Hence, it needs to be clear or understood by all stakeholders and the information must not inundate the recipients meaning all ground rules relating to good communication must be applied. This includes the avoidance of jargons and technical terms relating to risk especially when the targeted audience are not generally technically skilled. Efforts must be made to explain clearly some of the vital technical terms on risk management. Additionally, the communication or information on risk must be relevant and meaningful and carry a clear view of risk.

Furthermore, the timeliness is also a vital communication rule as it serves the purpose of allowing the action intended on the risk identified to be taken at the appropriate moment to treat the risk. ISACA in a 2009 publication also states that risk management decisions and policies must be directed towards the correct audience or people who have an immediate direct or indirect effect on the risks. In other words, the risks must be communicated at the right level of aggregation. It also reveals that risk-related information must be known and communicated to all parties with a genuine need as a risk register with documented risk is not for the public hence the need to protect such information from internal and external parties who have no need for it.

The search for a consistent and common language in risk management is not an easy task but regular workshops facilitated by centralized risk managers can ease the pressure and repair some constraints in the risk management information flow system (Barlow 2000, 32-

4). A free flow of information and deliberation on risk related matters helps to bring out key risks and how they should be assessed and managed (Hodge 2002, 18-22)

### 3.8 Barriers to Effective Risk Management.

The world business environment makes it difficult for an effective mechanism to be established to ascertain or identify risks. Even when efforts have been made to draft a comprehensive risk management framework, a lot of factors, both internal and external affect the smooth running and constant monitoring. This deprives the company or business from realizing the full benefits of the framework.

Due to financial constraints or lack of resources and the availability of personnel, there is a tendency for a difficulty to thoroughly evaluate the impacts risks identified in the first stage of risk management process objectively. This is because management will like to categorise risks and 'filter' them in adherence to strict budget in order to concentrate on the so called important risks (Page & Spira 2004, 20-25). While this may be understandable, if the risk register is kept within management proportions, subjective categorization of risks may affect Enterprise Risk Management effectiveness (Fraser & Henry 2007, 395).

It may be prudent for management to be responsible for decisions regarding the management of risks, the established of risk managing gives management the chance to diffuse responsibility, thus, serving as a comfort zone to them in the event of failure. The formalization of a risk management process creates a wide range of regulations and consequences (Bruce 2005, 22). Risks are usually interconnected so one adverse event may result in the crystallization of other risks (Page & Spira 2004, 30-31) and the consequences or effects may not be highly predictable. There is also a high probability of gaps in the established risk management system (Baker 2004, 32-6) as preoccupation with bureaucracy developed around the risk management process may obscure the identification of a risk that may critically impact negatively on the organizational goals and projections (Kilner 2004, 26-7). The ever changing government rules and regulations regarding risk reporting and standards (Piper 2004, 25-28) may force management to adopt old measures (Bruce 2005, 22-23) rather than effectively managing the identified critical risks. This is likely to happen when management doubt their projections.

Moreover as an organization grows both in size and personnel the need task to manage an effective risk management become increasingly cumbersome. This may be due to the fact that there is a greater need to delegate more and maintaining a high degree of risk appetite, consistency of language, risk prioritization and selection of management options (Fraser & Henry 2007, 396). There is also a problem of qualified personnel to manage the ever changing components of the risk management process as the business expands. There

is the tendency for incompetence, dysfunctional behavior or mere negligence by the people managing the system. This is detrimental to the effective management as the people constitute the system.

The characteristics of diverse ownership of risk management make it vulnerable for it to be perceived as a mere paper work rather a system that must be followed (Fraser & Henry 2007, 395-6).

### 3.9 Risks and Uncertainty

Risk and uncertainty have been used interchangeable over the years. In an attempt to have a clear view of the various risks that affect the operations of a business, a clear cut distinction needs to be made to sieve the various issues confronting a business and appropriate measures taken. Uncertainty shows a situation where the outcome of an event is unknown. It creates a situation where there is little or no pragmatic steps to reduce or prevent its occurrence. Management are only left with the option of building it into its strategy a degree of resilience such as having healthy asset (MacRobert J.F 2009, 221). This healthy assets can include a firm control of credit sales, sustaining a desirable levels of liquidity and maintaining buffer stocks products to counter uncertainties or take advantage of unexpected upturns in sales. It must be highly noted that this conservative measures have the tendency to limit the growth or expansion of the business.

With regards to risk, managers are able to anticipate the probable occurrence of an event when some likely predicted outcomes occur during business operations. Risk assessed must be prevented or the effects reduced through mechanisms available to the organization. This puts the management in a better position to counter risks easily and direct the activities of the business towards the attainment of organizational goals.

## 4. Research Methodology

To successfully run a business organization, an extensive research is required so as to aid in formulating strategic decisions. Research entails the collection of data and analyzing the collected data into useful management information which dictates the decision making of management. This underscores the immense role that research plays in academic research as well as in the business environment which cannot be underrated. The research method section of the study introduces major activities - the research strategy and the research design. The different elements within the research strategies and approaches will be discussed. Additionally, this section will touch on the empirical data collection and analysis. The empirical data collected is analyzed and subsequently discussed.

### 4.1 Quantitative Research

Quantitative research is defined as a structured questionnaire designed with the aim of deriving information from respondents. In this instance, the interviewer prepares the questionnaire with the expected results or answers in mind. The interviewer should therefore have enough idea about the said subject. This method can also be explained as a research tool concerned with the measurement of a market and can include the calculation of the size of a market segment, brand shares, purchase frequencies, awareness level of brands etc. Such data is required to be accurate to some extent as well as the methods used in achieving the aim. In most cases, the information gathered is a sample which reflects the situation in the general population or market. This method unlike qualitative method provides us with solid and concrete information with facts and figures to buttress the research. (Hague et al, 2004).

This research strategy is mainly employed in this study to gather data from various respondents working in companies complying with IFRS. However, qualitative research is also partly employed to give insight to the adoption of IFRS in developing countries.

### 4.2 Qualitative Research

Qualitative research is defined as a tool of research that is basically concerned with understanding rather accurate measurement. The method in question is unstructured using smaller samples to provide insight. The respondent gives their view, ideas, feeling as to how best they know. Unlike the quantitative method, the interviewer in this instance can effectively design the questionnaire even if he or she has less or no previous knowledge about the issue being investigated since it is only the respondents' thought that they are accumulated. In case of attitudes to brands, qualitative research can determine if there is a specific view held by consumers about the brand whiles quantitative will show what proportion of consumers holds that view. Another issue can be of this scenario, advert A is

more appealing to consumers than advert B (Quantitative Information). But how does A work as an advert and why is it more effective than B? Qualitative method in this instance addresses the second part of the case at hand. That is describing how the advertisement appeals to the individual consumers (Hague et al, 2004).

### 4.3 Data collection

Research data exists in two forms - primary and secondary. Primary data is non-existent and gathered for first time use. Primary data requires that the researcher investigates and keeps records of the findings on the topic of the study. Primary data is very preferable in studies where new models and theories are developed and proven empirically. In sharp contrast however, secondary data is usually an existing data that has been collected or gathered by other researchers or authors and accepted as valid and has a direct or an indirect link with the study conducted. Secondary data may not have been collected for the same purpose or study been conducted. It may have been collected for other purposes. Sources of secondary data include: annual reports, publications like books, journals, electronic sources like the internet.

### 4.4 Research Design

Research design involves the gathering and analysis of data. This is determined by the nature of the research. It also involves establishing the validity and reliability of the study. The purpose of the research design is to establish the connection that exists between the research questions, the data gathered and the conclusion to be established (Yin 1994, 3-10).

In the research design, methods used in the study are specified as well as the processes used in gathering and analysis of the data. In this study, the interview was conducted using structured questionnaires and personal interviews. The questions used in the questionnaire gathered the diverse opinions of the various respondents from which the conclusion of the study was made. The literature review served as a standard by which the questionnaire was designed.

#### 4.4.1 Exploratory Research

Exploratory research design is used to derive “insight into the general nature of the problem, the possible decision alternatives, and the vital variables that needs to be considered” (Kumar 2000, 23). In other words, exploratory research is most appropriate for the identification of problems, definition of problems and testing the possibility of new alternative courses of action. Exploratory research is more flexible and versatile to use in areas as formulating hypothesis regarding potential problems and opportunities. In this type of research, the researcher has little or no knowledge about the issue under research. Adap-

tation to any new developments that might emerge during the study is therefore necessary. This type of research is not as reliable as descriptive and causal. It is less rigorous since the researcher in this case aims at finding quick answers to potential problems that might be facing the company or institution in question. However, it is more economical in terms of time and money (Kumar 2000, 33). Exploratory research answers questions such as what, when, where, why, who, how or any combination of the above. Field research, case studies, focus group, structured interviews, document analysis are used to conduct exploratory research.

#### 4.4.2 Descriptive Research

Descriptive research defines the research type that takes into account the need for an accurate snapshot of some aspects of an issue at hand. In other words, this type of research aims at the describing an already existing phenomenon whether in the market, company, institution among others. Descriptive research also determines the rate at which certain specific events occur.

In a typical international business setting, descriptive research can be used to look for similarities and differences between markets and consumer groups (Kumar 2000, 40-70). Since the accuracy of the results of descriptive research is imperative it is therefore recommended that the data should be in large quantities so that it can effectively represent the actual population. Hypotheses are designed before the research is conducted and then tested with the collected data later on in the studies. The main objective of this type of research is to increase reliability, accuracy and minimize errors (Kumar 2000, 50-60).

#### 4.4.3 Causal Research

Causal research is a more precise research type that aims at the identification of cause and effect relationship in the market. It involves the introduction of certain factors and the measurement of the effects of these factors identified. Hence, it establishes the interrelationships between different variables or factors and how these variables affect the decision making in an organization. This allows the researcher to identify the variables that are the causes and which are the results as well as the ability to find “evidences of strong associations between the actions taken and the observed outcome and the actions that preceded the outcome” (Kumar 2000, 12-15).

Other forms of research designs include explanatory, understanding and predictive research.

In this study, I would employ a hybrid research method that entails both qualitative and quantitative methods. Under the qualitative research method, a case study would be used



and precisely exploratory case study. Under the quantitative method, a survey would be used and more specifically, structured questionnaire.

#### 4.5 Data analysis

Data analysis gives compelling reasons to reduce bias and to assist the study to make fair analytical conclusions that rules out misinterpretations (Yin 1994, 103). This process helps to transform the collected data into meaningful descriptive interpretations. Data analysis helps the researcher to synchronize the data collected against the meaning or implication of the study being conducted. Data analysis involves reducing the data, presentation of the data, verifying and drawing conclusions. Data reduction aims at screening the data gathered for the materials that are relevant to the study. Data presentation however deals with how the reduced data is presented either by the use of graphs or table. The conclusion aspect deals with the final analytical conclusion by the researcher.

This study followed similar pattern as described above. Respondents were asked questions based on the topic been studied. Also, prepared questionnaires were sent to various respondents to solicit their views and opinions on the study. After the collection of these data, reduction was made so as to weave out those materials that are not relevant to the study. After that SPSS was used to analyze the results of the questionnaire whiles the qualitative research data was also analyzed separately. The gathered information explicitly contained the expressed opinions of the respondents involved in the study.

#### 4.6 Validity and Reliability of the study

The term validity defines the degree of stability and consistency that is attributable to the conclusion drawn from the study which is likely to be confirmed by a different researcher (Yin, 1994:36). Often the work must be ascertained by the researcher that when another researcher carries out the same work, the conclusion will be the same or not differ very much and that similar conclusion can be drawn on a repeated research. A reliable study can be verified if the following questions can clearly be answered: If the researcher is able to objectively answer yes to the following questions, then it can be concluded that the results of the research is valid. The questions are; will the same results be achieved when the study is repeated at other times? Secondly, will similar observations be made by different researchers? Thirdly, are the conclusions made in the study transparent? (Saunders et al, 2006).

In ensuring that a study is reliable, a researcher is attempting to evade bias and to confirm that similar conclusion is possible when the study is replicated. (Saunders et al, 2006) identified the impediments to a reliable study as: participant error, participant bias, ob-

server error and bias. The first two emanates from the interviewee's reactions and the results produced from them. The last two however, may be caused by the interviewer in how he/she approaches the questions used during the study and his/her interpretation of the result.

To ensure that the study is reliable, the study relied on diverse and renowned authors of accounting in the literature review. Comparisons of various conclusions made by various studies were carefully examined. Questionnaires designed for collecting data was critically designed in line with the literature review. In order to enhance the degree of validity various sources of evidence are necessary. In this study, I employed diverse sources from which I obtained the needed information. I sent questionnaires to selected companies and institutions as well as personally exploring the accounting practices of some of the companies for three months. A few surveys were conducted to derive some measureable and concrete information to buttress the qualitative questionnaire. Results from existing studies were also compared to the results obtained from this study.

## 5. Empirical Study and Analysis

This section of the research entails analyzing and making known the result of the research. The qualitative and quantitative methods of data analysis were blended in this research. Exploratory research method also aided the findings. Quantitative research method was the main research method used.

### 5.1 Printex Ghana Limited

This company was first established in the 1950's as Millet Textile Corporation Limited specializing in the manufacture of towels. Activities focused on weaving and processing of furnishing, spinning, suitings and shirting materials beginning from the 1980's but it was renamed as Printex after a series of continuous modernization and expansion programs and also by the introduction of African Prints. Presently the company has about five hundred (500) employees who help in the production or manufacturing of high quality fabrics which are exported to countries in the sub-region and beyond. The company takes much pride in the introduction and successful management of new ranges or lines of fabrics and is at the forefront of fashion in the region. Colourful designs are derived from the blend of exotic colours of the African forest, the mystical mountainous areas and highlands, rays of sunset and the African forest. This has made their printed fabrics the main fashion prints patronized by the available customers.

The company is situated in Accra on a hundred thousand (100,000) square metre land at Spintex Road on a built up area of thirty-two thousand (32,000) square metres. Its manufacturing facility also has a fully computerized screening and designing machines that aids employees to come out with innovative and highly technological designs appealing to customers. This machine also helps the company financially as it brings about the reduction in lead time from the submission of customers preferred designs to production of the finished fabrics.

The African printed fabrics that the company deals in primarily are the most dynamic and colorful in the world at the moment. Designs released by Printex are mainly comprised from adinkra symbols or use of animals such as birds and are ideal for patchwork; clothing and quilt. The production process starts from the process applying a design unto a fabric by rotary screen methods where tubular screens rotate in a synchronized manner. Print paste is further circulated in that tubular screen and applied unto the fabric. It is then pressed firmly between the screen and the printing blanket. Further finishing processes are carried out for the product to appear as a typical unique African Print fabric. The following are a selection of the fabric designs of Printex Ghana Limited:

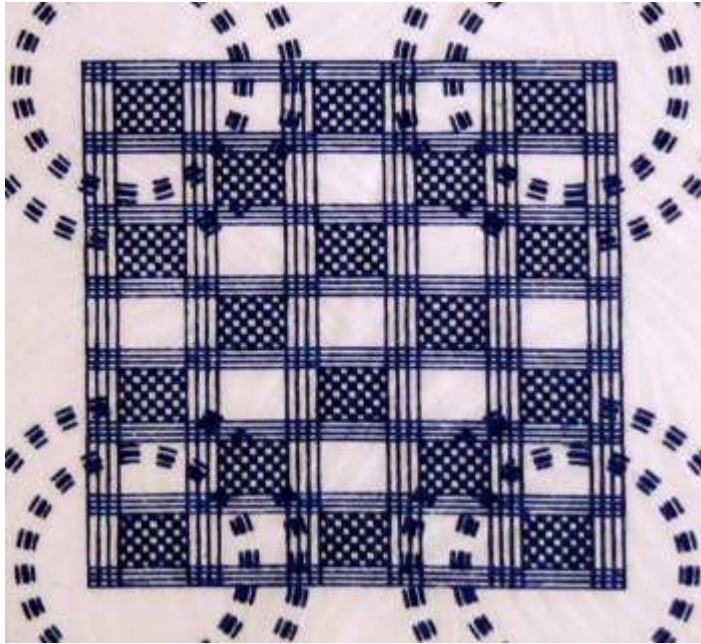


Figure 3: Soso Brand

Soso: this is a uniquely beautiful African print fabric imprinted with bush-like stroke in the background.



Figure 4:Seer Sucker Brand

Seer Sucker: made from cotton and it is made by bunching threads together thereby giving the fabric a permanent appearance.

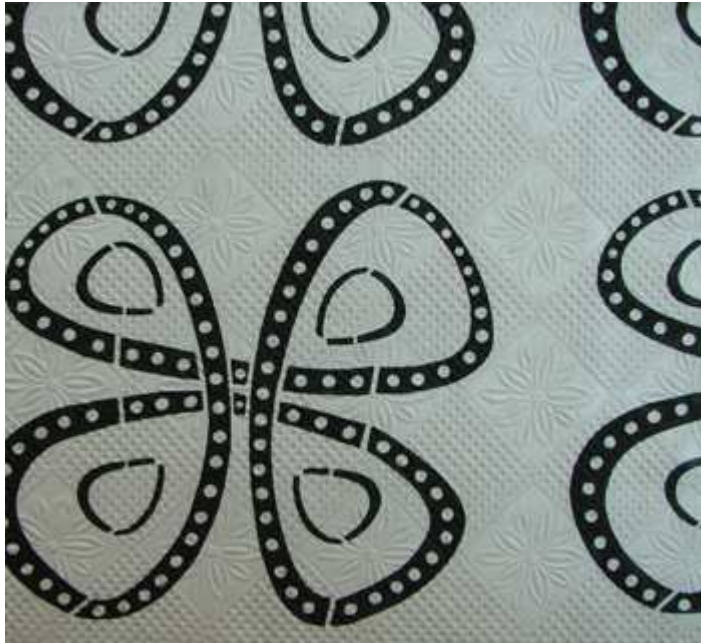


Figure 5: Opanyin Brand

Opanyin: highly unique fabric embossed with various Adinkra symbols

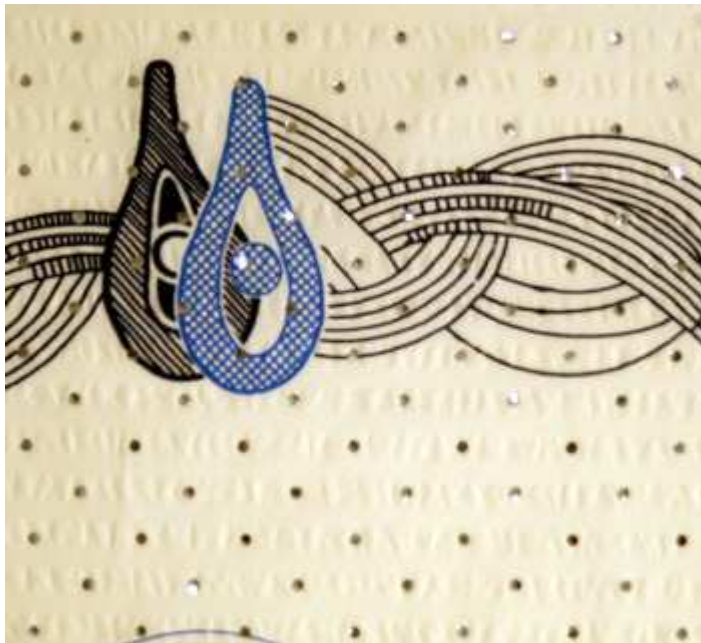


Figure 6: Egudie Brand

Egudie: this is decorated with bright spangles

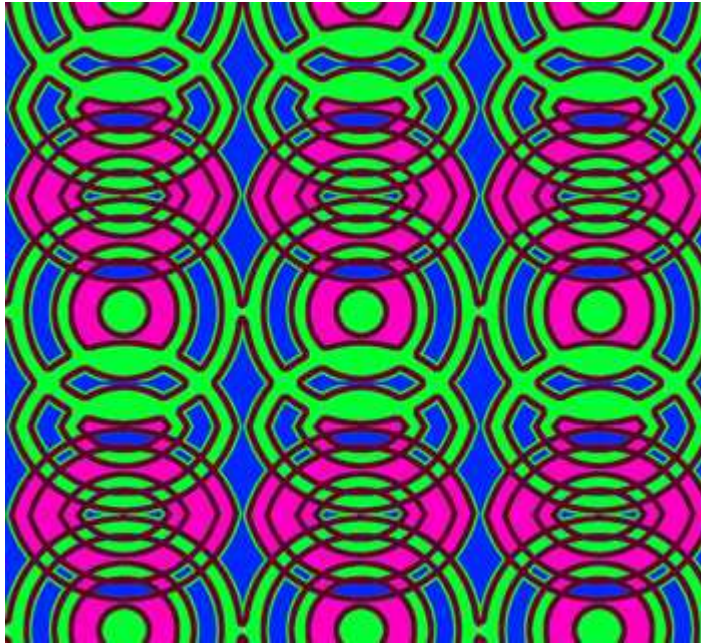


Figure 7: Xclusive and Arete Brand

Xclusive and Arete: cotton fabrics with a collection of colourful African prints



Figure 8: Ntumapa Royale Brand

Ntumapa Royale: A popular range on cotton fabric and ideal for exclusive occasions





Figure 9: Lace Brand

Lace: the edges of the fabric are decorated with openwork and patterned by a machine that gives the open spaces of lace fabric. The style here is duplicated by mechanical means that gives its unique valuable and exotic appearance.

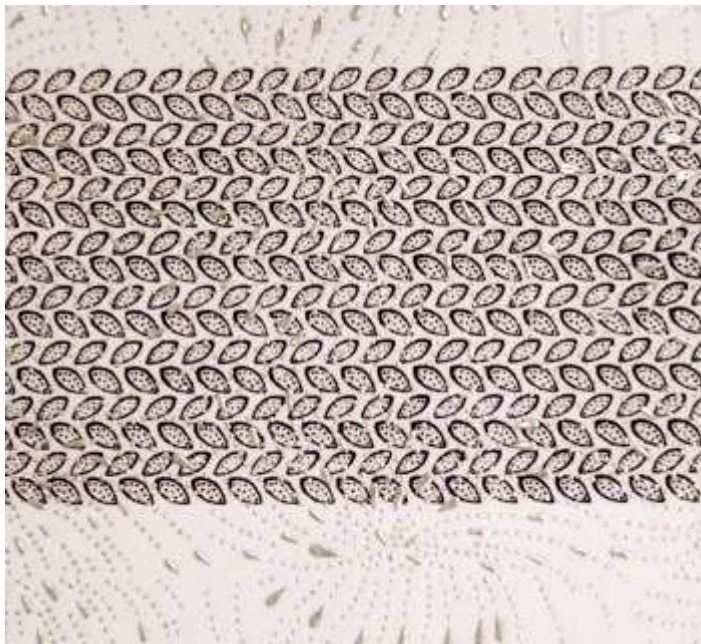


Figure 10: Oheneba Brand

Oheneba: African prints endorsed with imprinted gold or silver designs to give it an opulent extravagance.



Figure 11: Osekini Brand

Osekini: Cotton fabric goes through a process of application of foil with heat and embossing to arrive at the desired effect. This fabric is printed by a stamped image in a special film backed material to a design in gold or silver.

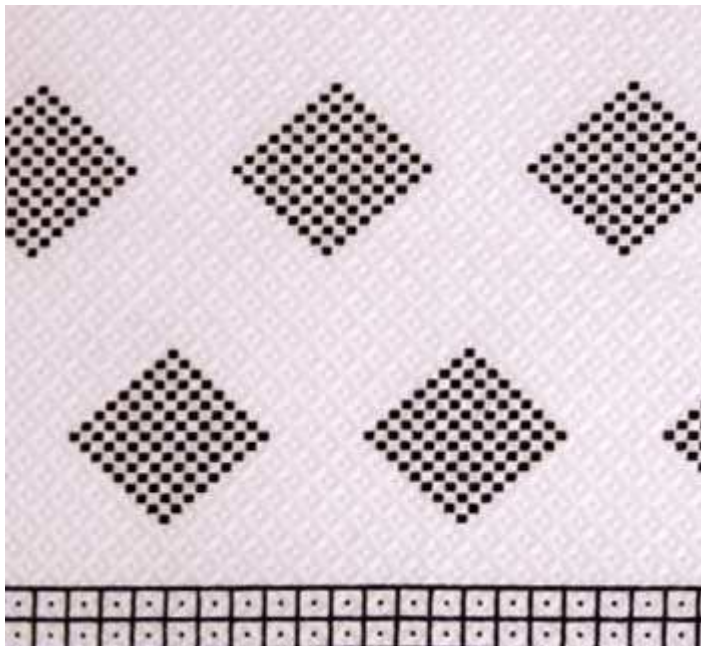


Figure 12: Diamond Brand

Diamond: diamond like impressions are printed on the surface





Figure 13: PV Printed Brand

PV Printed: this is a new and innovative design on polyester viscose material. This is used as school uniforms and office wear.

Printex is the leading textile manufacturing company in Africa by providing ranges of fabrics for the cultures and traditions of Africa.

### 5.3 Akosombo Textiles Limited

This company was established in 1967 on a forty-seven acres land in Akosombo, and near the Akosombo Hydroelectric dam, dealing in yarn, dye or print fabrics and grey cloth. It had total workforce of about one thousand four hundred and fifty (1,450). Its prints are very widely known among the indigenous Ghanaian populace. It also produces high quality materials and designs which appeals to customers beyond the borders of Ghana as it is the largest textile company operating in the Ghanaian market currently.

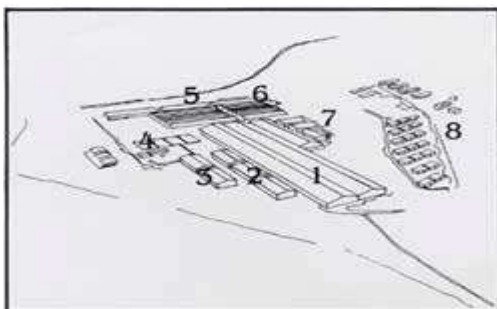


Figure 14: Akosombo Textile Layout

Footnote:

1. Spinning and weaving plant
2. Quality inspection
3. Cotton Stores
4. Water treatment tanks
5. Wax printing and rotary screen printing
6. Dyeing and finishing plant
7. Chemical store
8. Apartments



Figure 15: Akosombo Textile Limited .Tudu,Accra

The company is currently owned by CHA Textiles, a leading supplier of nonwovens, cotton-based textiles and synthetic fibers and yarns. It's a supplies its products to global markets in a form of apparel, footwear, home furnishings and other highly regarded textile activities. The Cha Textile group was established in 1949 and started its operations in Africa around 1964 in Kaduna, Nigeria. A constructive long term-term outlook and innovative-ness is a hallmark of the Cha Textiles group which Akosombo Textiles Limited is proud to be associated with.

## 5.4 Country Profile-Ghana



Figure 16: Map of Ghana

Formed from the merger of the British colony of the Gold Coast and the Togoland trust territory, Ghana in 1957 became the first sub-Saharan country in colonial Africa to gain its independence. It has a population of approximately twenty five million and a land area of 238,538 square miles. The country shares boundaries to the north with Burkina Faso, on the west by Cote D'Ivoire, to the east with Togo and south by the Gulf of Guinea. Its southernmost coast is the Cape Three Points and almost half of the country lies less than 152 metres (500 feet) above sea level whilst the highest point is 2,900 feet.

The climate condition is normally tropical making the eastern coastal region to be warm and dry, southwest to be hot and humid at the same time and the north typically hot and dry. This contributes to the fact that farmers in the north find it difficult to grow anything in the period of long dry season as there is an absence of rain coupled with high temperature making it quite impossible for most crops to thrive under those harsh conditions.

Inflation rate as at March 2010 was 14.23% but it dropped to 9.10% in April 2012 with further inflation target for 2012 fiscal year set at 8.50% (Stanford University and The Index on Africa - Ghana:2012).

The Ghanaian economy has been boosted by a quarter century of relatively better management, a competitive business environment, and sustained reductions in poverty levels among the populace. Ghana has a huge reserve of natural resources. Agriculture accounts for about one-quarter of Gross Domestic Product (GDP) and employs more than half of the workforce. The services sector accounts for half of the country's Gross Domestic Product (GDP). Individual remittances, gold and cocoa are major make the bulk of foreign exchange. Oil production at Ghana's offshore Jubilee field began in mid-December, 2010, and is expected to contribute to a progressive economic growth. The country's management anyway faces a huge challenge of managing this new oil revenue. Maintaining a sound fiscal discipline, whilst resisting debt accumulation is a problem. Estimated oil reserves have peaked at to almost 700 million barrels according to the Public Interest and Accountability Committee (Ghana). Ghana joined the Heavily Indebted Poor Country (HIPC) program in 2002. The country also benefits from the Multilateral Debt Relief Initiative that took effect in 2006 (Bank Of Ghana report, 2008).

## 5.5 The Ghanaian Textile Industry

It is predominantly cotton-based sector. Ready-to-wear garments made for the domestic market, custom-made garments, export-based readymade garments and traditional textiles (kente and wax prints) are the four main sub-divisions of the Ghanaian Textile Industry. According to statistics, the industry employed about 25,000 employees as at 1977 accounting for about twenty-seven percent (27%) of manufacturing employment but that

figure has plummeted to 5,000 workforces as at 2000. The sector boasted about forty (40) companies in the mid 80's but currently the three main companies are Akosombo Textiles Limited, Printex Limited, Ghana Textile Printing Company Limited (GTP) and Ghana Textile Manufacturing Company (FTMC).

They are supported by The Ministry of Trade, Industry, Private Sector Development and Presidential Special Initiative (PSI) and The Garments and Textiles PSI Secretariat. The main regulating body is the Ghana Standard Board (GSB) established in 1973 by the NRCD 173 decree (Quartey 2006, 136-145). The exporting of fabrics and wax prints are an important part of export revenue for the Ghanaian government and firms in the industry themselves. The main exporting countries according to a 2004 estimate were 55% to European Countries, 25% to the USA, 15% to countries in the sub region and the remaining 5% to other countries( 2007 National Budget: Ministry of Trade, Industry, PSD & PSI). A number of networks and committees such as, the Textiles and Garments industry Cluster Network which was established with the sole aim of solving the emerging problems in the sector. The building of the Textile and Garments Training Centre among other initiatives by the government have boosted the performance of the companies in the industries in recent years (Ghana Investment Promotion Council 2009, 20-27)

Additionally the following incentives and investment opportunities are available to the companies and individuals in the textile and garment manufacturing industry:

- a. quota-free and tariff access to the US market based on approved African Growth and Opportunity Act (AGOA) visa
- b. favored industry status for garment exporting companies
- c. quick support and facilitation of investments provided by the government and other private-public sector development consortium available
- d. ready access to sites and premises for textile factory building
- e. co-operation and active support of labour unions (textile industry)
- f. shipping ports with modern facilities
- g. total exemption from customs import duties on plant and machinery, equipment and accessories imported exclusively and especially for establishing enterprises (textile companies included)
- h. depreciation or capital allowance of 50% in the year of investment and 25% in subsequent years for plant and machinery, respectively, and 20% in the first year and 10% in subsequent years for building
- i. corporate tax rebates between 40% to 75%
- j. periodic(per annum) investment allowance of 7.5%
- k. full repatriation of earnings in the currency of investment
- l. total exemption from payment of direct or indirect duties and levies on all imports for production purposes and exports from the Free Zones

- m. exemption from payment of income tax on profits for a decade. (income tax rate after this period shall not be more than 8%).
- n. complete exemption from payment of dividend taxes arising out of Free Zone investments
- o. no import licensing requirements
- p. 100% ownership of shares in the business entity by any investor
- q. no conditions or restrictions on the repatriation of dividends or net profits

### 5.6 Quantitative Research Analysis (Cross Analysis)

A total of forty six coded or numbered questionnaires were distributed to the various active players in the textile industry. Out of that, two companies responded and hence thirty two questionnaires were answered. Sixteen questionnaires for each of the two companies involved.

#### 5.6.1 Age Distribution

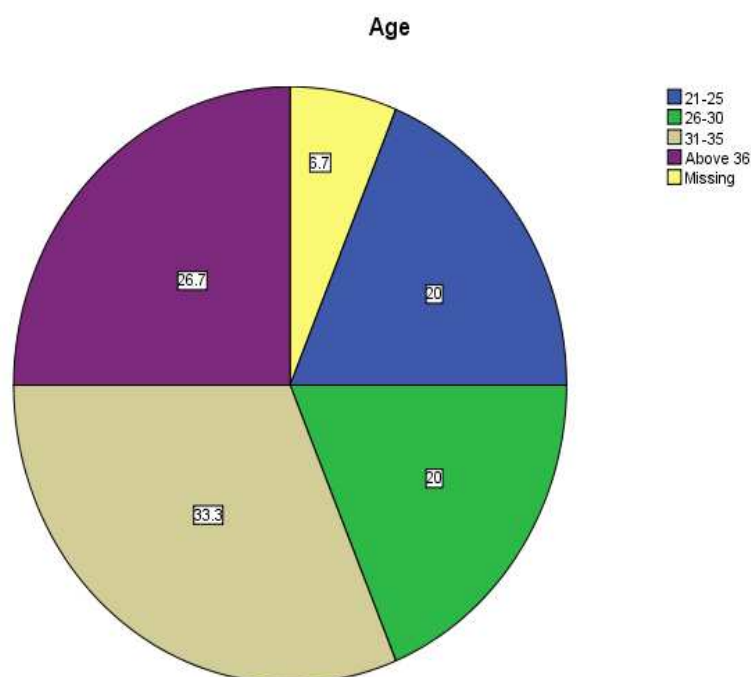


Figure 17: Age Distribution-Printex



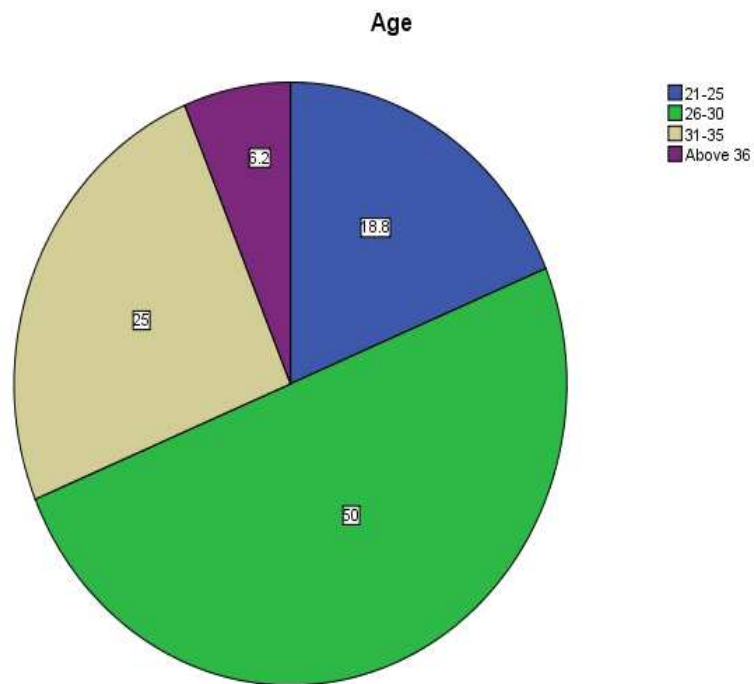


Figure 18: Age Distribution-Akosombo

Both companies seem to have a lot of its employees under the age of thirty (30). Printex has most of its employees below the age of thirty (30). 26.7 percent of employees are above the age of thirty six (36), 20 percent are either between the ages of twenty (20) to thirty (30). Four respondents were above the age of thirty six (36). Akosombo Textiles Limited had more than half of its employees below the age of thirty (30), 25 percent in the early thirties and one respondent above the age of thirty six (36).

## 5.6.2 Gender Distribution

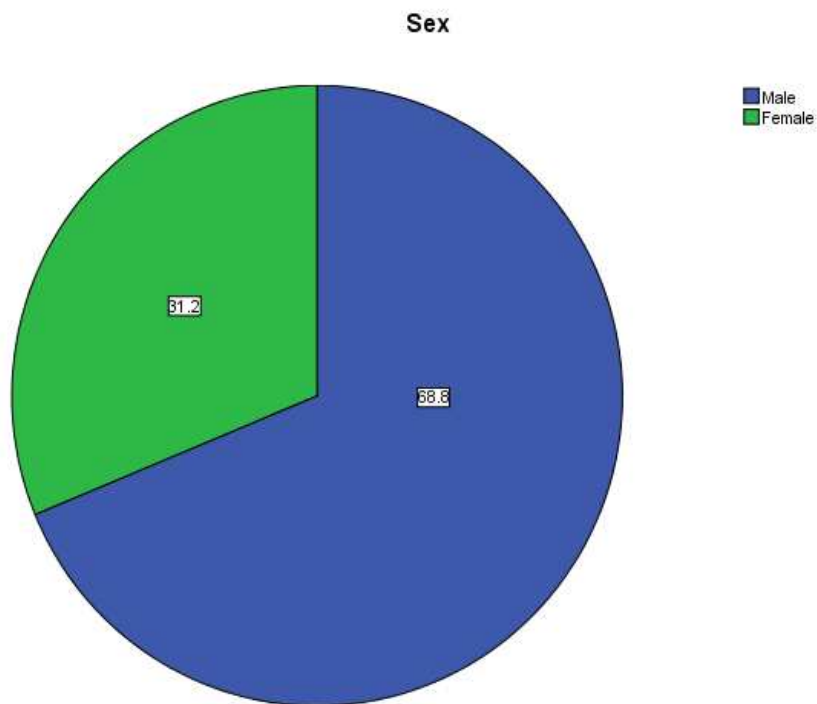


Figure 19: Gender Distribution-Printex

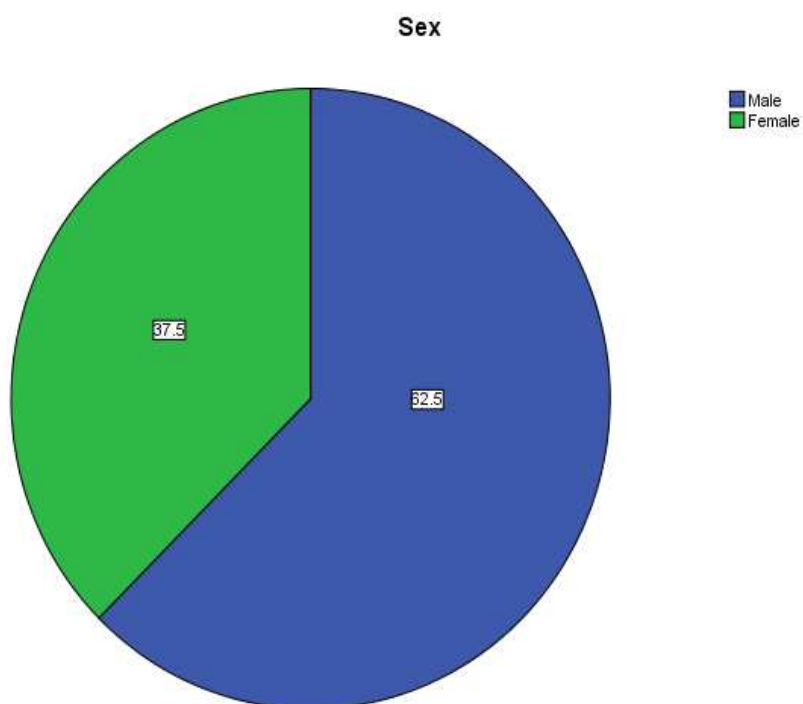


Figure 20: Gender Distribution-Akosombo



Akosombo Textile Limited had 62.5 percent and 37.5 percent as male and female specifically. 68.8 percent of respondents were male whilst 31.2 percent were female in the case of Printex Ghana Limited.

#### 5.6.3 Educational Level

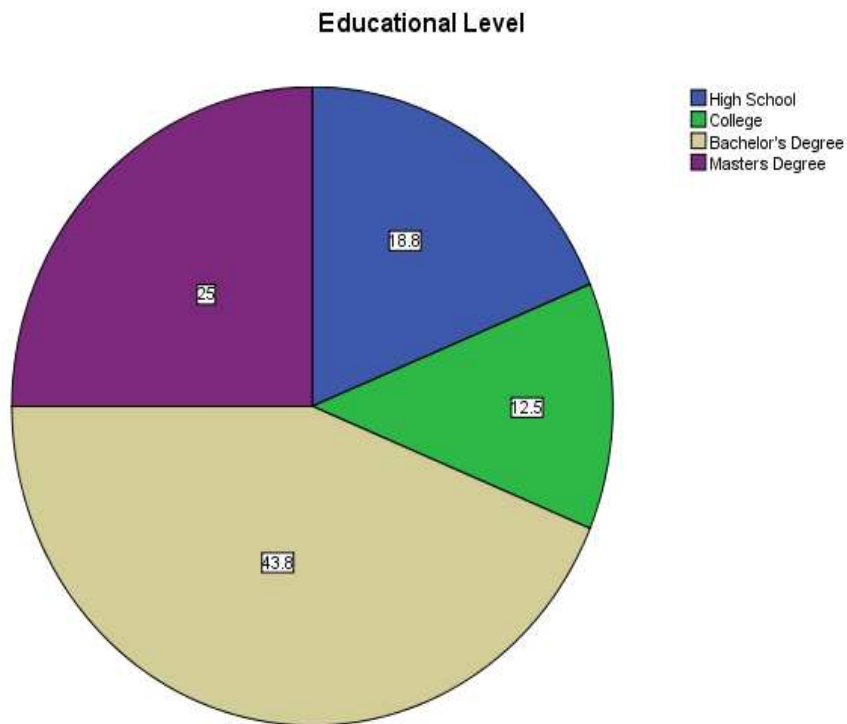


Figure 21: Educational Level-Printex

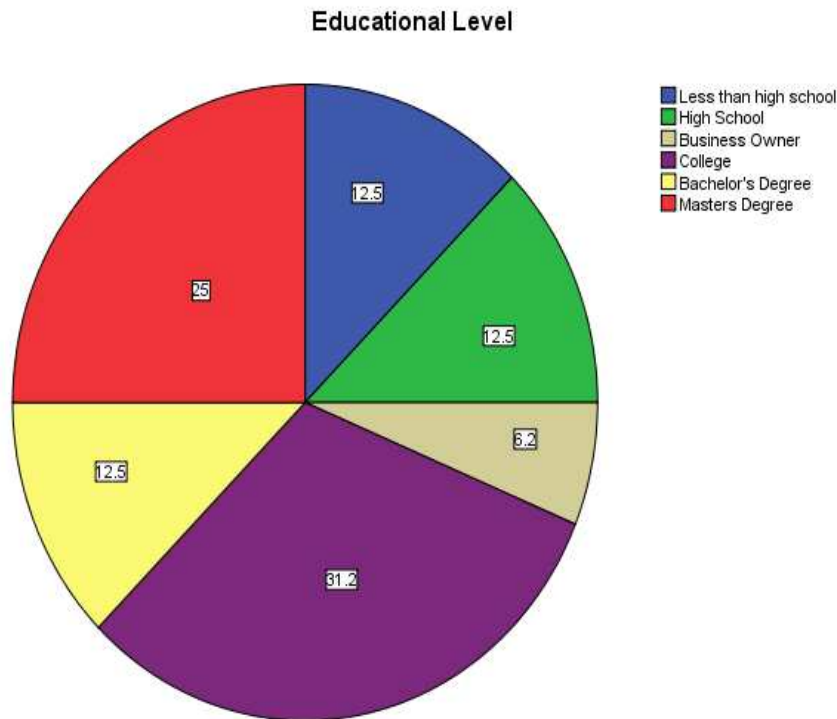


Figure 22: Educational Level-Akosombo

Majority of respondents had an undergraduate or bachelors degree, 25 percent were had masters degree. 12.5 percent had attended college whilst 18.8 percent of respondents from Printex Ghana Limited had at least finished high school. According to statistics gathered from Akosombo Textiles, 31.2 percent of the respondents had finished some college. 25 percent graduated with a master's degree, 6.2 percent representing one respondent a business owner. Others have either finished high school, less than high school or a bachelor's degree. This is represented by 12.5 percents each for those three different levels of education.

## 5.6.4 Risk Management Department

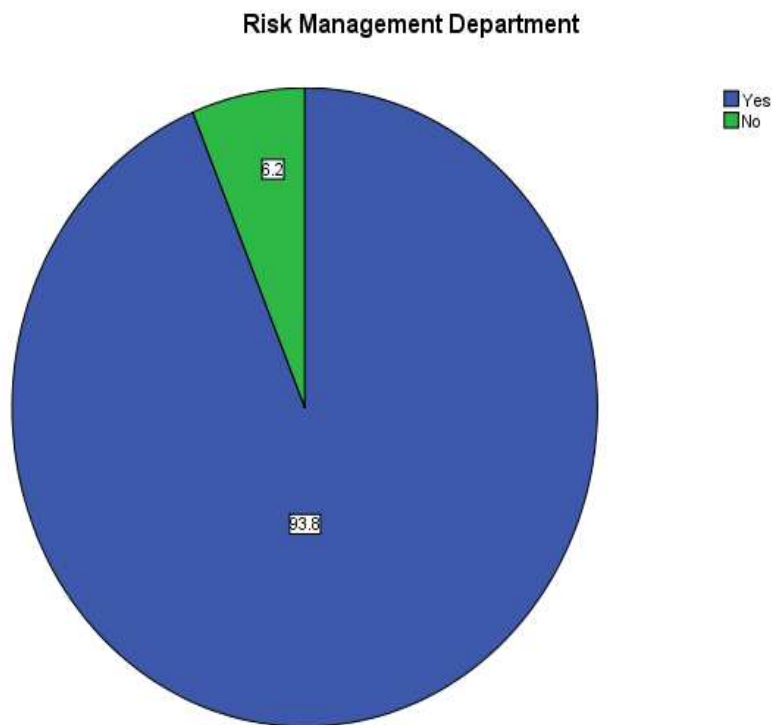


Figure 23: Risk Management Department-Printex

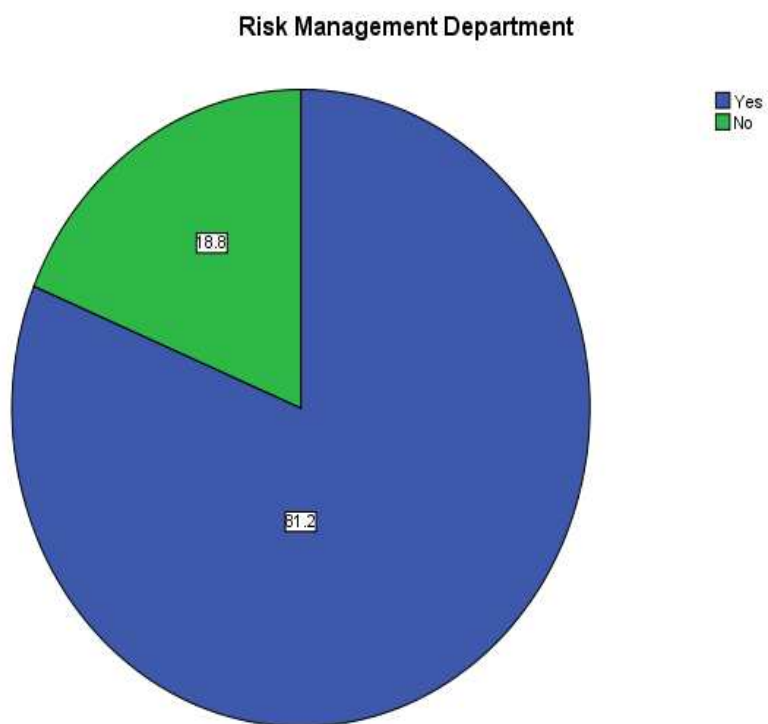


Figure 24: Risk Management Department-Akosombo

The question of whether there exist a risk management or not was a quite easy as respondents were tasked with answering yes or no. Reasons must be given if respondents happened to choose a “no” answer. In Printex, employees and management think they have a risk management in place as indicated by the 93.8 percent of respondents answering positively to the question. 6.2 percent representing one respondent said risk management does not exist in the company set up. The reason was that it was too expensive to manage. A similar result was attained from Akosombo Textiles Limited as 81.2 percent of respondents answered yes. Three (3) respondents representing 18.8 percent answered no. One was not aware if the process existed, another said it was too expensive whilst the last respondent said it not necessary.

#### 5.6.5 Risk Responsibility

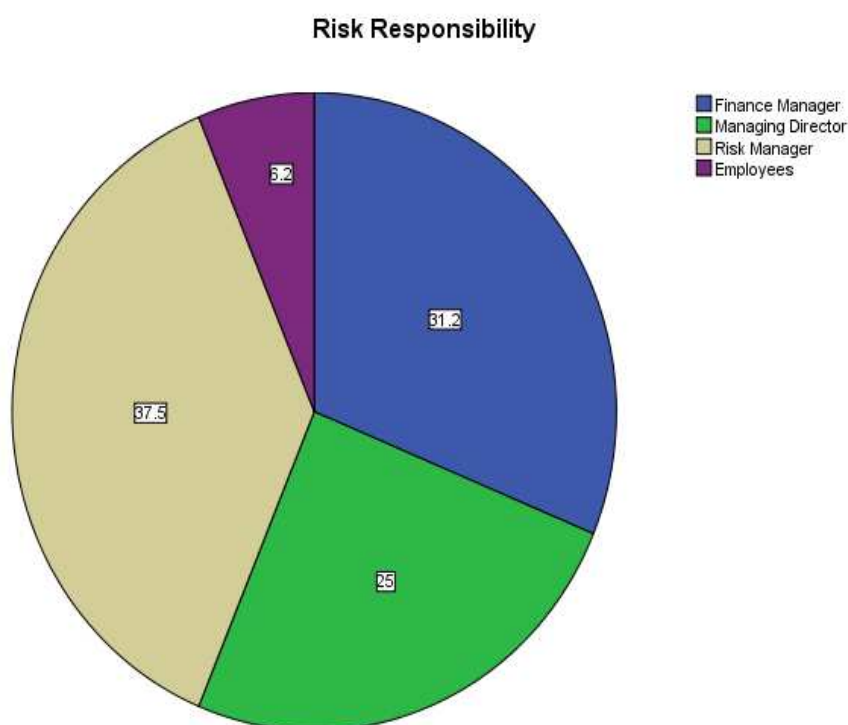


Figure 25: Risk Responsibility-Printex

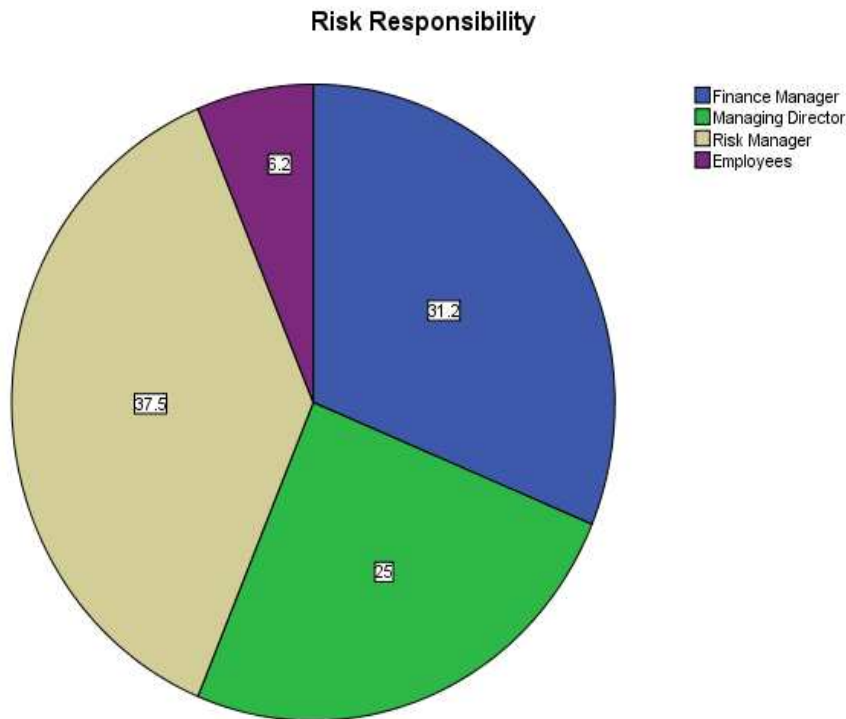


Figure 26: Risk Responsibility-Akosombo

In Akosombo Textiles Limited, the risk manager is mostly consulted on issues regarding to risk, 37.5 percent of respondents. 25 percent will give that job to the Managing Director, 31.2 percent for the Finance Manager and 6.2 percent of respondents will leave the risk identification and analysis of the company in the hands of employees. Respondents from Printex Ghana Limited also have the same figure as Akosombo Textiles Limited. This clearly shows the attitude of respondents in both case companies to risk management.

## 5.6.6 Budget Percentage

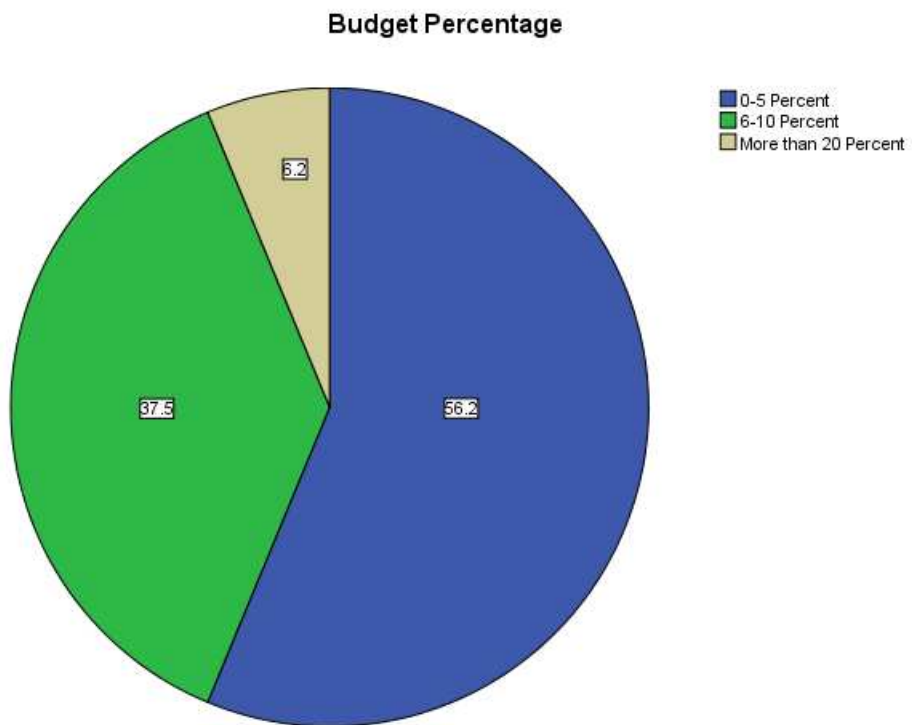


Figure 27: Budget Percentage-Printex

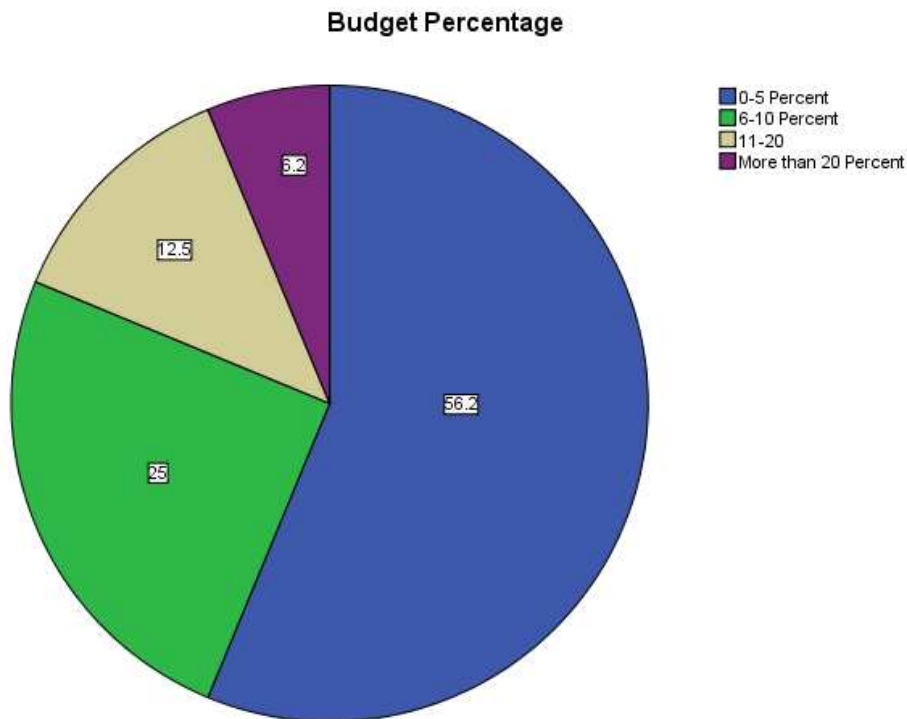


Figure 28: Budget Percentage-Akosombo

The total budget allocated for risk management in Printex was mostly between zero (0) to five (5) represented by 56.2 percent of respondents. Others think it is between six (6) to ten (10) percent indicated by 37.5 percent of respondents. One respondent peaked it at above twenty (20) percent represented by 6.2 percent of 100 percent.

Akosombo Textiles Limited just as Printex Ghana Limited has 56.2 percent of respondents saying budget allocated to risk management is below five (5) percent. Twenty five (25) percent of the respondents mentioned that, their company budgets six (6) to ten (10) percent on risk management whiles 12.5 percent said eleven (11) to twenty (20) percent and finally 6.2 percent for more than twenty (20) percent of annual budget.

## 5.6.7 Cost Effectiveness

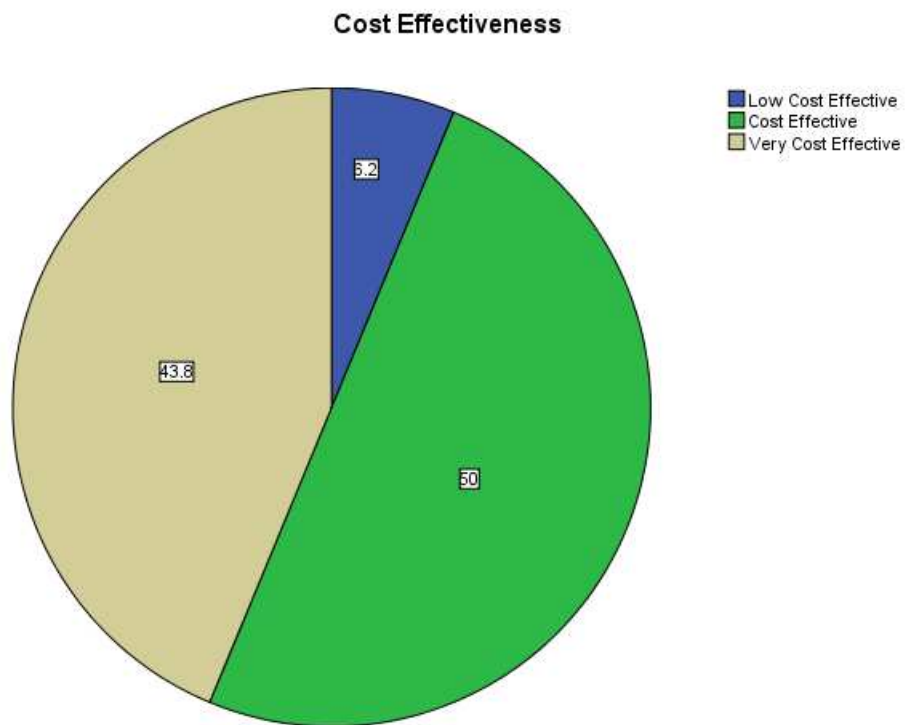


Figure 29: Cost of Effectiveness - Printex

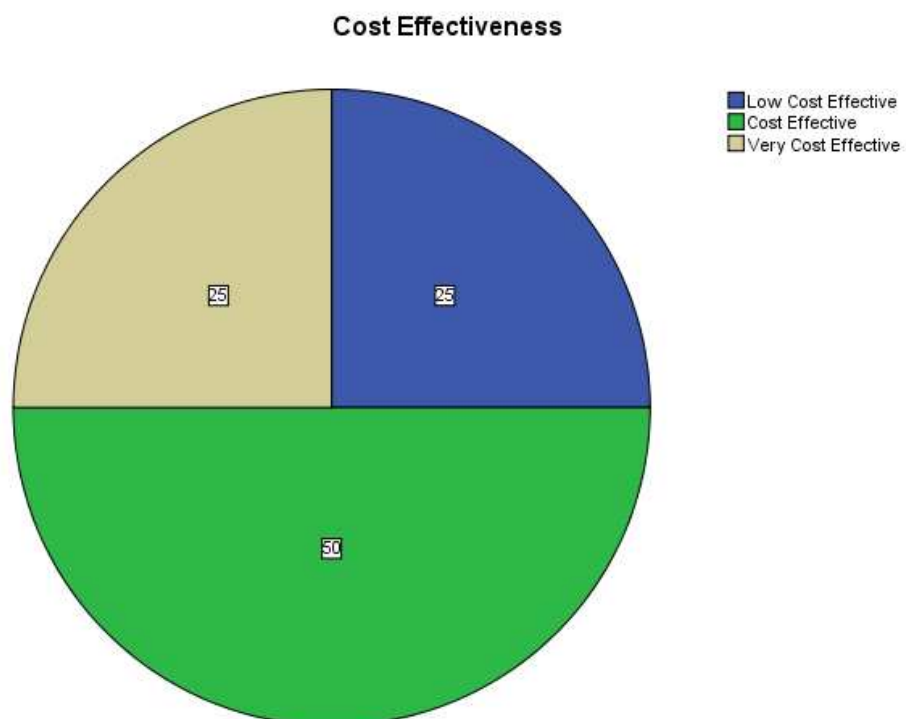


Figure 30: Cost of Effectiveness - Akosombo



Respondents from Printex regarded the risk management in their company as very cost effective and necessary for business operations to flourish. This can be seen from the chart as fifty (50) percent recorded the approach as cost effective. 43.8 percent regarded it as very cost effective whilst 6.2 percent of respondent ranked it as low cost effective. In the case of Akosombo Textile also, half of respondents said risk management was cost effective. The other half of respondents, 25 percent apiece regarded it as either very cost effective or low cost effective.

a. Reason for Ineffectiveness

RESPONDENTS	REASON FOR INEFFECTIVENESS
16	Legal policies and protection of domestic products is weak
15	Not implementing effective planning
14	High cost of risk management approaches
13	Inefficient risk management, skilled personnel are not available
6	Not done properly, bad communication of risk between employees
2	Lack of expertise

Table 3: Printex - Reason for Ineffectiveness

The lack of expertise in risk management and the high cost of risk management make the approach ineffective. The legal policies, methodologies and assumptions associated with risk management adoptions are also too complicated to be understood by unqualified personnel managing risks. There is also an absence of good communication medium between the various departments and employees.

RESPONDENTS	REASON FOR INEFFECTIVENESS
2	Risk management is placed under the finance department. They believe risk management is too expensive to maintain as a separate department

4	Lack of cooperation from other departments, lack of understanding as to the responsibility of the risk management team, fear that risk management might constitute internal auditing
7	Lack of personnel
8	Bad attitude

Table 4: Akosombo Textile Limited - Reason for Ineffectiveness

In Akosombo Textile Limited respondents gave reason as the lack of qualified risk personnel and bad attitude towards risk management as possible reason for its ineffectiveness. Cooperation between the various department was non-existent, making it quite impossible to have a clear view of what risks exists in those departments. The finance department taking up the task of risk identification instead an autonomous risk management department is also a contributing factor.

b. Reason for High Cost Effectiveness

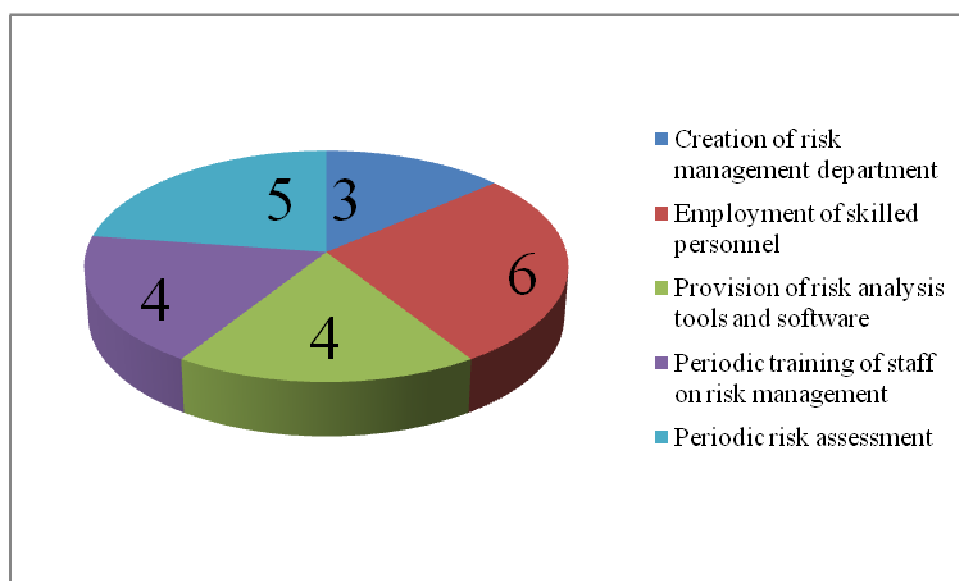


Figure 31: Reason for High Cost Effectiveness - Akosombo

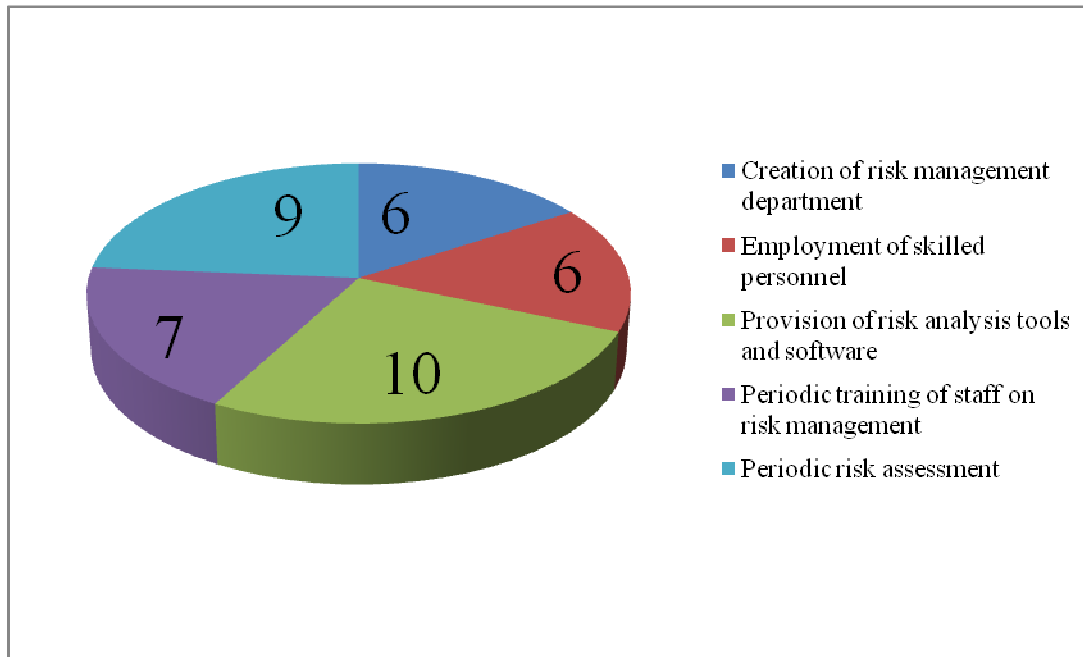


Figure 32: Reason for High Cost Effectiveness -Printex

From Figure 30, respondents from Akosombo Textiles Limited attributed the employment of skilled personnel as a contributing factor to the slight increase in the effectiveness of risk management over the past years. Five (5) times respondents chose periodic risk assessment and four (4) times each chose either periodic training or availability of softwares. From Figure 31, respondents chose periodic risk nine (9) times, periodic training was ticked seven (7) times whilst creation of risk management department and skilled personnel were shaded six (6) times each.

### 5.6.7 Risk Identification Methods

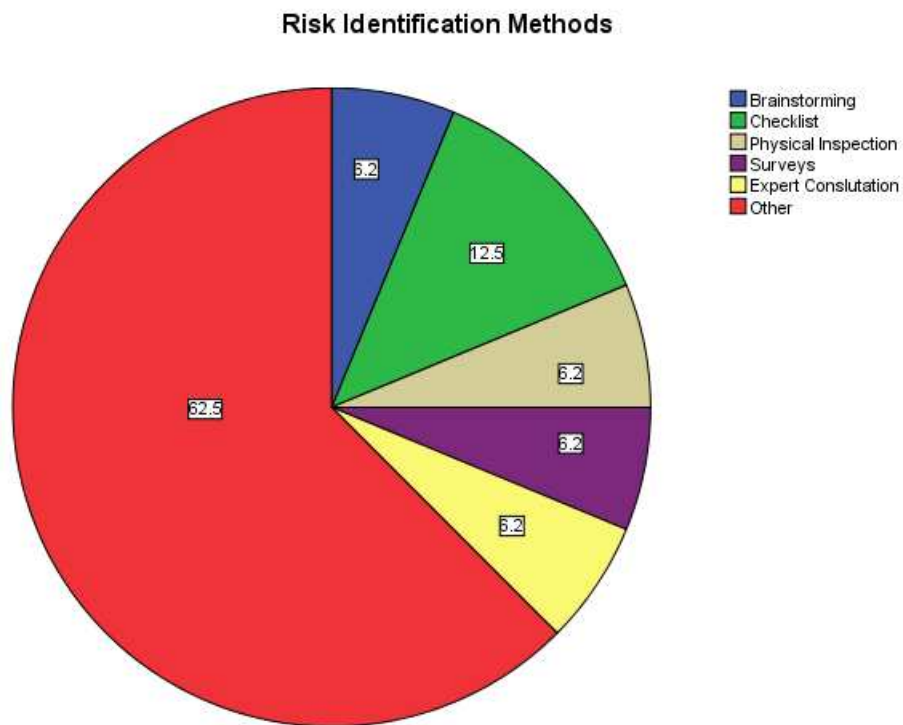


Figure 33: Risk Identification Methods - Printex

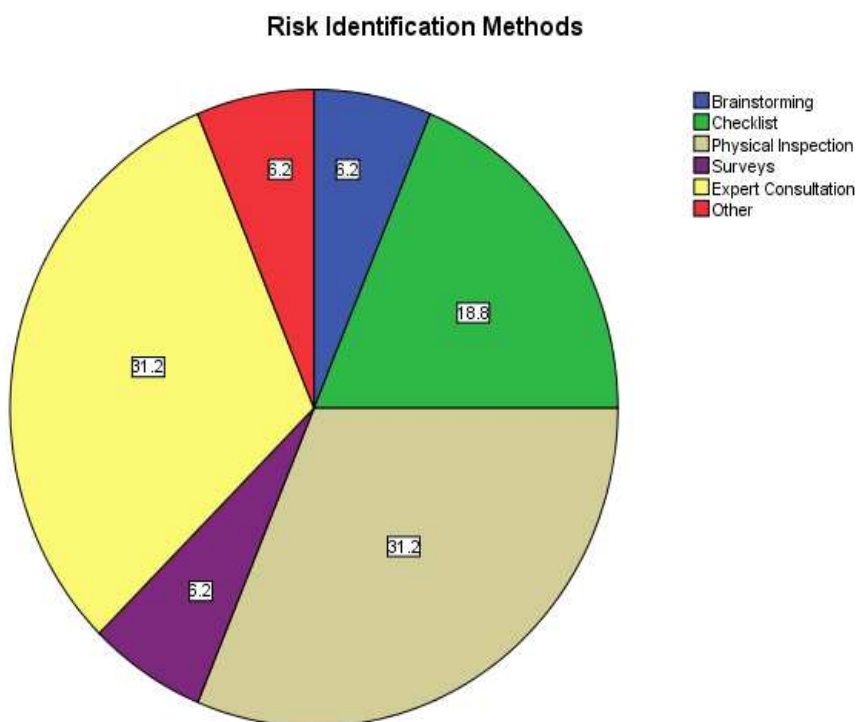


Figure 34: Risk Identification Methods - Akosombo

As can be read from the charts above, Printex mostly uses other means in the identification of risks. From the questionnaire, respondents listed benchmarking, interviews, media stream, market response and conduction of risk assessment as the other means of risk identification used.

Akosombo on the other hand uses physical inspection or expert consultation in the identification of potential risks. Three respondents will use checklist whilst one respondent each will prefer either other means of risk identification or surveys. Two respondents identified interviews as the other means of risk identification method used in the company.

## 5.7 Qualitative Analysis

### 5.7.1 Identified Risks

The following are the results on what the pressing risks facing the company

RESPONDENTS	STATED PRESSING RISKS
1	Exchange rate fluctuations, Influx of second hand clothing.
2	Politics, Imports, “white mans dead” - importation of foreign clothing
3	Imports, Technology, Government rules
4	Political instability, China products
5	
6	Changes in laws and regulations, Bureaucracy
7	Capital, taste and style, Lack of technical know-how, Modernization
8	Distribution costs, Foreign competition, Political issues, Cheap imports
9	Lack of local demand for local textile products
10	High cost of raw materials, High transportation cost
11	Raw Materials, Security
12	Access to Finance, Infrastructural problem, Low Income Earning, High Taxes, Government policies, Poor power supply
13	Power cuts
14	Energy issues, Imports of foreign second hand clothing
15	Problem with adequate electricity
16	Reducing demand, Access to finance, Unstable policies

Table 5: Identified Risks- Printex

As can be seen from the respondent the issue of political instability and import are the most pressing risks. It has been revealed in the research that those imports can be the

imitated wax prints from China or the influx of second hand clothing from the western world. This has prevented the company from producing underwear, blankets and socks. Inadequate or unavailability of raw materials has also had a negative effect on the smooth operations of the company. Problem of frequent power cuts also slows down production activities.

RESPONDENTS	STATED PRESSING RISKS
1	Interruption of electricity power supply, distance between production site and market, unstable economy, technology, obsolete machines
2	Infiltration of cheap textiles from China, depreciation of the local currency, high cost of transportation, frequent power outage, volatile economic stress
3	Politics, energy, china products, limitation, raw materials
4	Imports, politics, environmental, poor transportation
5	Importation, “white mans dead”, competition, political instability, raw materials
6	Energy, import, transport, raw materials
7	“obroni w’awu”, raw materials, power and electricity
8	High cost of production materials, high cost of electricity
9	Power supply is one pressing risk, location of the production site, influx of cheap textiles in the market
10	Political, raw materials, energy
11	Government policy, raw materials, marketing
12	Technical advancement, low research and development, high marketing expense, crowded out effect, low expertise
13	Inflation, fake products
14	“Loadshedding”, unemployment, low wages, bureaucratic procedure
15	High cost of raw materials, low legal protection of textile company, high transportation cost, high competition from foreign products
16	Tough competition, foreign exchange rate, interest rate

Table 6: Identified Risks- Akosombo

All sixteen respondents at least identified some basic risks they can easily identify in their various areas of work. Here also importation was a major problem as that has reduced the demand for the original wax prints. Economic and political situation was also high on the risks identified. The energy situation and the load shedding exercise undertaken by the countrys government has drastically slowed down the production process as it becomes highly unpredictable to rely on power supplied by the Electricity Company of Ghana. Competition from foreign companies, smuggled and or imitated wax prints is also a big problem that must be attended to as soon as possible. Inadequate raw materials also affect production and number of yards of wax prints produced in a day.

#### 5.7.2 Benefits of Risk Management

RESPONDENTS	IDENTIFIED BENEFITS
1	Improves the working conditions of workers, improve the earnings of the company
2	Cost reduction, realization of key objectives
3	Profit, risk conscious by employees, reduced risks
4	High profits, lower costs, there is greater awareness of risks
5	Risks identified, profits increase, good decisions and planning
6	Profit, risks are easily identified, better smooth business operation
7	Profits
8	The company has benefited from risk management as workers are always conscious of what to do to make the company withstand the test of time
9	Sustain the company from going bankrupt, encourage workers to work in more committed way
10	Profits, risk avoiding
11	Risk management enables the company top foresee future profits or loss -It helps management to take adequate action - It enables management to determine employees skills on managing risks
12	
13	Profit maximization
14	Reduced inefficiency, economies of scale

15	Not very much
16	

Table 7: Benefits of Risk Management- Akosombo

From all the respondents it was synonymous that the availability of risk management will increase profitability of the company. It will also help to identify risks that are likely to affect both management decisions and employee working life. Employees become risk conscious thereby majority of risks are avoided. Efficiency of both employees and total business strategies increase.



RESPONDENTS	IDENTIFIED BENEFITS
1	Support continuity in textile industry, helps to identify risks, it helps to maximize company earnings, ensures discipline among staff
2	
3	Releases locked up funds or helps in good use of limited resources
4	
5	It serves as point of indication of profit or loss, helps management to make strategic decisions, gears up financial strength of the company
6	Risks identified, revenue increases, business growth
7	
8	Helps management in making sure planned objectives are in line with current performance.
9	Better planning attitude as risks are identified
10	Profit maximization
11	Helps management to select products to produce
12	Increase profits
13	Profits, good decisions and planning
14	Profits , risks identified
15	Save some funds
16	

Table 8: Benefits of Risk Management- Printex

The benefits Printex Ghana Limited acquired through accurate risk management procedures all centered on profit maximization. Its aid in the decision making process and planning was also not ignored. The most basic but important benefit is the idea that risk management helps management to identify potential risks for comprehensive steps to be taken to either avoid or reduce their negative effects.

### 5.7.3 Changes in Risk Management

With reference to the response acquired, it can be said that there have a slow change or no change in the way risk management have been handled over the past years that both companies have been in operation. The attitude and mode of risk identification and treatment has been almost the same. There is an absence of proactive attitude in identifying risks. This is shown in the absence of a separate risk management department tasked with handling all issues pertaining to company risks.

#### 5.7.4 Risk Management Communication

Identified risks are normally communicated to the employees through the notice board in Akosombo Textile Limited. Some also get the information through other employees in the company. Printex Ghana Limited also has a similar system. The public address is used seldom to communicate to employees.

## 6. Conclusion and Recommendations

Risk management exists in both Printex Ghana Limited and Akosombo Textile Limited but employees have little or no knowledge. Some do not even know the role risk management plays in the operation of the business. Employees have not been educated on how to identify potential risks or hazards no matter how small it will be. Vitally the various risks facing the industry were identified as the importation of cheap imports from China and other western world. Goods from China tend to be cheaper as the Chinese government subsidize their country's exports. Original quality wax prints are also easily imitated and sold to the populace at cheaper prices. Government policies and rules have also affected companies drastically. Smuggling of wax prints across the Ghanaian border is also an issue to be tackled. The free market system allowed unhealthy competition which the local textile industry are not able to cope with. Lack of resources and finance were some of the reasons for not being able to compete with foreign products. There is not a single and autonomous risk management department in both Akosombo Textiles Limited and Printex Ghana Limited. The process is not regarded as important but expensive and complicated to manage. Its role is hence disregarded. Qualified risk management personnel are not employed in the companies. There is also an absence of a comprehensive and better managed procedure of risk identification. The few identified risks are not properly communicated to the employees or other management personnel. Respondents did not really recognize the need for risk management in the company though they accepted it will be an essential element in the day to day management of the company. This can be due to the lack of education on what risk management is. The manner in which risk management has been undertaken has been the same over the past years, unstructured and does not follow laid down procedure. The budget allocated to risk management is either unavailable or too low to yield any better result. In both company the duty of identifying risk has been delegated to the finance department.

Management must therefore take steps to educate employees on the issue of risk management. Workshops and seminars on risk management can be organized periodically for employees. Qualified risk personnel must be employed and an autonomous risk department must be established. A good and reliable medium must be chosen for the communication of identified risks to employees. A thorough risk matrix and risk management plan can be made for easy handling of risks in both companies.

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## Appendix 1

LAUREA UNIVERSITY OF APPLIED SCIENCES

QUESTIONNAIRE DESIGNED FOR BACHELOR'S THESIS ON "ANALYSING THE ROLE OF RISK MANAGEMENT IN A TEXTILE PRODUCTION COMPANY - GHANA"

## Definitions

*Risk*: a condition where there exist a probability of deviation from desired or expected outcomes

*Risk management*: the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities.

1.Age		
a.	Below 20	<input type="checkbox"/>
b.	21-25	<input type="checkbox"/>
c.	26-30	<input type="checkbox"/>
d.	31-35	<input type="checkbox"/>
e	Above 36	<input type="checkbox"/>
Other		.....

2. Sex                      M <input type="checkbox"/> F <input type="checkbox"/>		
3. What is the highest level of education you completed? Choose only one		4. What pressing risks are facing your company presently in the textile industry?
<input type="checkbox"/>	Less than high school	<input type="checkbox"/>
<input type="checkbox"/>	High School	<input type="checkbox"/>
<input type="checkbox"/>	Business owner	<input type="checkbox"/>
<input type="checkbox"/>	college	<input type="checkbox"/>
<input type="checkbox"/>	Bachelor's degree	<input type="checkbox"/>
<input type="checkbox"/>	Master's degree	<input type="checkbox"/>
<input type="checkbox"/>	Ph.D.	<input type="checkbox"/>
5a. Do you have risk management team?		5b. (refer to 5a)
Yes		No
		Please state why
6. Who is mainly responsible for risk management in your company?		7. What percentage of the company's budget is allocated to risk management?
<input type="checkbox"/>	Finance Manager	<input type="checkbox"/>
<input type="checkbox"/>	Managing Director	<input type="checkbox"/>
<input type="checkbox"/>	Risk Manager	<input type="checkbox"/>
<input type="checkbox"/>	Employees	<input type="checkbox"/>
<input type="checkbox"/>	Other Departmental Heads	<input type="checkbox"/>
<input type="checkbox"/>	No one	<input type="checkbox"/>
		-----

8A. How cost effective have the risk management been so far?	<div style="display: flex; justify-content: space-between;"> <span>&lt;Low Cost Effective</span> <span>Very Cost Ef-</span> </div> <div style="text-align: center;">fective&gt;</div> <div style="text-align: center;">Please tick only one</div>
--	---

	1	2	3	4	5
Cost Effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8B. In case of 3, 4 or 5 why has it been effective?

a.	Creation of risk management department	<input type="checkbox"/>
b.	Employment of skilled personnel	<input type="checkbox"/>
c.	Provision of risk analysis tools and software	<input type="checkbox"/>
d.	Periodic training of staff on risk management	<input type="checkbox"/>
e	Period risk assessment	<input type="checkbox"/>
Other		

In case of 1 or 2, why hasn't it been effective?

a.		
b.		
c.		
d.		
e		

Has the company benefited from the risk management?

a.		
b.		
c.		
d.		
e		
Other		

10. How does the company identify potential risks?		
a.	Brainstorming	<input type="checkbox"/>
b.	Checklist	<input type="checkbox"/>
c.	Physical Inspection	<input type="checkbox"/>
d.	Flowchart	<input type="checkbox"/>
e.	Surveys	<input type="checkbox"/>
f.	Expert consultation	<input type="checkbox"/>
Other	.....	
11. How have risk management issues changed over the decades (analyze your company only)		
12. How is risk management communicated within the company		